

# 1985 61st annual

## SUMMARY OF ILLINOIS FARM BUSINESS RECORDS



### COMMERCIAL FARMS: Production / Costs / Income / Investments

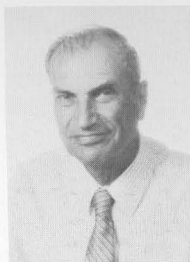
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN / COLLEGE OF AGRICULTURE / COOPERATIVE EXTENSION SERVICE  
CIRCULAR 1263

## RETIREES:



**Kenneth "Ken" Stevens**, a Fulton County native, graduated from the University of Illinois in 1948 with a degree in Agronomy. He began a teaching career that fall at Athens in Menard County. In 1951, he moved to Good Hope and served as vocational agriculture instructor for the next seventeen years. This term of service was interrupted by a one-year stint as instructor in Cuba, Illinois. While teaching, he also continued his education on a part-time basis, receiving a Master's Degree in Education in 1968.

Ken was employed by the Western FBFM Association in August, 1968. Located in Good Hope, McDonough County, he gave the board of directors his full cooperation, working wherever needed. In various years Ken also served cooperators in Fulton, Hancock, Henderson, Peoria, Schuyler, Stark, and Warren Counties. He retired in November, 1985, after having contributed greatly to the education of the farmers of western Illinois for 35 years.



**Keith Amstutz**, a native of Indiana and a Purdue graduate, started his career with FBFM in 1949. In addition to his regular fieldman duties, Keith served as Business Manager for the Illinois Farm Business Farm Management Association from 1960 to 1979. Much of the business management work for the local Pioneer FBFM Association was picked up by Keith through the years, and for the last 20 years he has carried all the responsibility of Business Management for the Pioneer Association. He guided the growth from 900 cooperators served by 5 field staff, to 1,300 cooperators served by 11 field staff.

It would be impossible to record all the contributions Keith has made to Agriculture throughout the years, but it should be mentioned that he is the key designer of a modified farm record book that can be custom fit to suit any combination of grain and livestock enterprises. These designs are now used by some 9,000 farmers in 3 states.



**Charles M. "Chuck" Roodhouse** is a native of Green County, Illinois. He graduated from the University of Illinois in 1942 with a B.S. degree in General Agriculture. Chuck served for the next two years as an airplane engineer instructor for the War Department at Chanute Field. In July 1944, Chuck began his career of service with the U.S.D.A. Soil Conservation Service. This work took him to Bloomington, Sullivan, and Shelbyville.

Roodhouse began his employment with the Blackhawk FBFM Association in late December, 1952. This was the start of an almost 30-year association with the farm records program. Chuck directed the expansion of the association from just one staff member when he started, to six staff members by his retirement in January, 1982.

Chuck's trademark was completeness and quality in the records that he supervised. As an executive fieldman, Chuck demonstrated an ability to control costs, which resulted in a most economical service for farmers in the Blackhawk region.



**Grant McGill**, a Stark County native, graduated from the University of Illinois in June, 1943. For the next two and one-half years he served in the U.S. Army, reaching the rank of Lieutenant. In April, 1946, Grant began his service to agriculture as an assistant farm adviser in Lee County. October, 1948, saw him shift to IAA Insurance, working in Grundy and then Mason counties.

Grant was employed by the Illinois Valley FBFM and began serving LaSalle County in October, 1951. In April, 1956, he transferred to the Western Association in Knox County, serving that area until October, 1960. For the next few years, Grant farmed near Toulon before rejoining the Illinois Valley FBFM Association in December, 1966.

Grant was a quiet and dedicated individual who worked for improvements in fieldmen's welfare. Today's fieldstaff owe him much for numerous insurance and retirement benefits that presently are taken for granted.

## SOURCE OF DATA

This report is based on data obtained from farm business records on 7,699 Illinois farms. It is the 61st in a series of annual summaries of such records obtained from farmers cooperating with the University of Illinois Cooperative Extension Service, the Department of Agricultural Economics, and the Illinois Farm Business Farm Management (FBFM) Association.

At present, about one out of every five commercial farms in Illinois over 500 acres is enrolled in this service. The service had grown steadily until 1982, but enrollment has declined slightly each year since then. One factor contributing to this decline has been the lower levels of farm income during the last half decade, resulting in fewer farm operators. In 1986, 10 associations in 102 counties are being served by 68 full-time field staff. Participation in this farm business analysis program is voluntary, with cooperating farmers paying a fee for the educational services.

The program's development since 1940 is shown below.

Year	Associations	Counties participating	Field staff employed	Farmers enrolled
1940 .....	3	23	3	680
1950 .....	8	59	15	2,760
1960 .....	10	100	33	5,494
1970 .....	10	102	42	6,553
1980 .....	10	102	67	8,205
1985 .....	10	102	70	7,699

Estimates for 1985 indicate that 86 percent of the 7,699 farms covered in this report are larger than 240 acres. For the most part, this 86 percent falls within the size of business that includes farms selling \$40,000 or more of farm products per year. In the 1982 Census of Agriculture, farms selling \$40,000 or more accounted for 89 percent of all sales from Illinois farms.

The segment of Illinois agriculture that includes farms with more than 180 acres is often referred to as "commercial farming." In 1982, there were 48,568 farms in Illinois with more than 180 acres and with sales of \$10,000 or more. The figures that follow, taken from the 1982 Census of Agriculture, show that these farms represented 73 percent of the 66,958 farms larger than 50 acres and produced more than 97 percent of the agricultural products sold from Illinois farms.

Acres per farm	Percent of total farms over 50 acres	Percent of census farms enrolled in FBFM	Number of farms enrolled in FBFM
180-499 .....	45.8	10.3	3,148
500-999 .....	20.7	19.8	2,738
1,000-1,999 .....	5.4	20.7	744
2,000+ .....	0.7	16.6	79

Although most of the 1985 record-keeping farms covered in this report are within the two smaller-size groups, the figures show that they are not distributed proportionately among the groups. There were 4,073 farms with more than 1,000 acres in 1983. About a fifth of these farms (20.2 percent) were enrolled in the Illinois FBFM Association. Of the 13,837 farms in the group having 500 to 999 acres, 19.8 percent also participated in the farm record program. Only about 5 percent of the farms enrolled had fewer than 160 acres. The average size of all farms enrolled in 1985 was 611 acres, compared with an average of 319 acres for all Illinois farms.

The data presented in this report are group averages identified by size of business, type of farm, and quality of soil found on the farm. Where segments of Illinois agriculture are identified by these criteria, the data from record-keeping farms may be used with reasonable confidence, even though the record-keeping farms as a group do not represent a cross section of all commercial farms in the state.

## USES FOR THIS REPORT

The management of a modern commercial farm involves decision making in the application of technology, the choice of a proper combination of crop and livestock enterprises, and effective business administration of the farming operations. A basic analysis of a farm business involves a careful study of past performance to detect problems and strengths in the farming operation. Also involved is the process of planning and developing future operations to realize the full potential of the land, labor, and capital resources available and to improve the economic efficiency of the farm business.

The farm-business summaries contained in this report are used by individual farmers to analyze their business operations and to develop plans for future farming operations. This report summarizes the information so that specialists involved in agricultural extension, research, teaching, and agribusiness activities may use the data to help them perform their duties effectively. The definition of terms and accounting measures will be of assistance in using the data.

The first part of the report (Tables 2 to 7) summarizes recent changes in farm income on Illinois farms. It also identifies economic forces and factors that contribute to these changing trends. Some data used in the text are drawn from previous issues of this report.

The second section (Tables 8 to 18) presents data on the livestock enterprise. The comprehensive and detailed information contained in this section is a valuable resource for anyone interested in livestock production. Because part of the feed grains and roughages produced on Illinois farms is marketed



through livestock, the margins of income from livestock enterprises are important in interpreting the economic results of some farming operations.

The third section (Tables 19 to 27a) reports costs, returns, financial summaries, investments, land use, and crop yields for different sizes and types of farms in northern, central, and southern Illinois. It also reports on the 25 percent of grain farms that received the highest return to management and the 25 percent that received the lowest return, and on two-man (21 to 27 months of labor) and three-man (31 to 39 months of labor) hog and beef farms.

## DEFINITION OF TERMS AND ACCOUNTING METHODS

### Soil-productivity rating

This rating is an average index representing the inherent productivity of all tillable land on the farm. Individual soil types on each farm are assigned an index ranging downward from 100. All ratings were revised in 1971 to reflect a basic level of management as outlined in Illinois Extension Circular 1156, *Soil Productivity in Illinois*. New land values were assigned in 1980. The annual change in land values represents an accounting adjustment to bring land values to current market levels.

### Hay equivalents, tons

To get the equivalents, we took the total of 1.0 × pounds of hay, 0.45 × pounds of hay silage, 0.33 × pounds of corn silage, and 24 × pasture-days per feed unit, multiplied by the total feed units per cow, and divided by 2,000.

### Type of farm

**Sampling technique:** Data from all records certified for analysis by field staff were aggregated by size (acres or number of cows), type of organization, value of the feed fed, and soil-productivity rating. Electronic data-processing was used to summarize the data.

**Grain farms:** Farms where the value of the feed fed was *less* than 40 percent of the crop returns and where value of feed fed to dairy or poultry was not more than a sixth of the crop returns. Since 1973, farms with livestock have been essentially excluded from the sample of grain farms in northern and central Illinois in Table 19; since 1978, from the grain-farm sample in Table 20; and since 1982 from the grain-farm sample in Table 4.

**Hog or beef farms:** Farms on which the value of feed fed was *more* than 40 percent of the crop returns and either hog or beef-cattle enterprises received more than half of the value of feed fed.

**Dairy or poultry farms:** Farms where the value of feed fed was *more* than 40 percent of the crop returns and either the dairy or poultry enterprises received *more* than one-third of the value of feed fed.

### Cost items

**Value of feed fed** includes on-the-farm grains with the following average prices per bushel: corn, \$2.54; oats, \$1.65; and wheat, \$3.16. Commercial feeds were priced at actual cost, hay and silage at farm values, and pasture at 40 cents per animal unit per pasture-day. A pasture-day represents an intake of approximately 20 to 25 pounds of dry matter, defined as 16 pounds of total digestible nutrients (TDN) from the pasture used.

**Cash operating expenses** include the annual cash outlays for these nondepreciable items: fertilizer, pesticides; seeds (including homegrown seeds); machinery repairs; machine hire; fuel and oil; the farm share of electricity, telephone, and auto expenses; building repairs, drying and storage; hired labor; livestock expenses; taxes; insurance; and miscellaneous expenses. Purchased feed and livestock are not included because they have been deducted from gross receipts in computing the value of farm production. The interest paid is not included because an interest charge is made on the total farm investment. But total interest paid by the operator only on all debt, operating plus longer term, is listed separately in Tables 19a to 27a under "Selected Cost Items per Tillable Acre."

**Machinery and equipment** include depreciation, repairs, machine hire, fuel and oil, and the farm share of electricity, telephone, and auto.

**Labor** includes hired labor plus family and operator's labor charged in 1985 at \$1,150 a month.

**Interest on nonland capital** covers the interest charged at 11 percent on the sum of one-half the average of the January 1 and December 31 inventory value of grain plus the average of the January 1 and December 31 inventory of remaining capital investment in livestock, machinery and auto, buildings, and soil fertility plus *one-half* the cash-operating expense, exclusive of interest paid. In Tables 4, 6, and 7 this charge is combined with the land charge-net rent and labeled interest charge on capital. The average cash interest paid per farm by all farm operators was \$18,863. Details on operator and landlord shares of expenses and income are published annually in research reports by the Department of Agricultural Economics.

**Land charge-net rent** is the bare land priced at current land values × 4.2 percent to reflect landlord net rents received.

**Total nonfeed costs** include cash-operating expenses, adjustments for accrued expenses and farm-produced inputs, depreciation, and charges for unpaid



labor and interest including land charge. Purchased feeds and livestock are omitted.

**Value of land (current basis).** The basic value is adjusted each year according to the February index of land prices in Illinois as reported by the USDA. An additional adjustment was made to this index in 1984 to reflect the large drop in land values. The land value index for 1985, using a base earning value of 1979 = 100, was 67.

**Capital account adjustment.** This includes the gain or loss on capital items sold plus the adjustments to capital items for basis lost or basis recovered when electing the 10 percent investment tax credit for income tax reporting.

## Return items

**Crop returns.** This is the sum of grain, seed and feed sales, value of homegrown seed used, the value of all feed fed (except milk), and the change in value for feed and grain inventories, less the value of feed purchased.

**Value of farm production.** The total is for cash and accrued value of sales of products and services, less the cost of purchased feed and livestock, plus the change in inventory values for grain and livestock, plus the value of farm products used.

**Net farm income.** Value of farm production, less total operating expenses and depreciation, plus gain or loss on machinery or buildings sold and cost basis adjustment when electing the 10 percent investment credit for income tax reporting. This figure includes the return to the farm and family for unpaid labor, the interest on invested capital, and the returns to management. Before 1980, this item was identified as farm and family earnings or net farm earnings.

**Labor and management income per operator.** This is total net farm income, less the value of family labor and the interest (including net rent) charged on capital invested. This figure as the residual return to all unpaid operator's labor and management efforts is then divided by months of unpaid operator labor and multiplied by 12 to reflect income for one operator on multiple-operator farms.

**Capital and management earnings** are net farm income, less a charge for all unpaid labor.

**Management return** is the residual surplus left after a charge for unpaid labor and the interest or land charge on capital are deducted from net farm income.

**Rate earned on investment.** Capital and management earnings (interest on all capital and land charge plus management returns) per \$100 of the total farm average annual investment.

## RECENT CHANGES IN INCOME ON ILLINOIS FARMS

### Farm business trends in 1985

Illinois agriculture is based largely on crop production, especially corn and soybeans. In 1984, Illinois ranked first in the nation in the production of soybeans and second in the nation in the production of corn. The total value of corn and soybeans produced on Illinois farms was 16 percent of the total U.S. production for these crops. In 1984, the total value was 61 percent of the total cash receipts in Illinois from all crops and livestock and 90 percent of the cash receipts from all crops sold by Illinois farmers.

**Crops.** Year-to-year variations in net income are related to crop yields, grain prices, and acres in high cash-value crops. In 1985, the average corn yield for Illinois was 135 bushels per acre, up 18 percent from last year's yield of 114 bushels per acre. Record-keeping farms averaged 143 bushels per acre in 1985, compared with 120 bushels in 1984. Soybean yields were 43 bushels per acre in 1985 compared with 32 in 1984. Crop yields on the 7,699 recordkeeping farms covered in this report averaged 5 percent above the average for all Illinois farms reported by the Illinois Crop Reporting Service.

The prices received for all soybeans sold during the year averaged \$1.70 to \$1.87 per bushel below 1984 prices, depending on location in the state (Table 1). Corn prices received in 1985 averaged 46 to 48 cents less than in 1984. Wheat sold for 15 to 33 cents less per bushel during the year. Negative marketing margins on old-crop corn and soybeans inventoried at the beginning of the year averaged about 2 cents for corn and 45 cents for soybeans. Year-end new crop corn and soybean inventory prices were 5 to 15 percent below the previous year's inventory prices.

Production of most crops was at record levels in 1985. Corn, soybeans and sorghum established record production levels. Compared with 1984, production of corn in 1985 was up 23 percent, soybeans up 35 percent, sorghum up 84 percent and hay up 5 percent. Wheat production declined 48 percent from the previous year. The Illinois 1985 All Crop Production Index, using a base value of 1977 = 100, was 120.5. This was up 24 percent from the previous year and establishes a new record high index for Illinois. Excellent growing conditions existed over much of the state in 1985. Acreages of corn harvested for grain increased 4 percent from 1984 to 1985 while soybean acreage declined slightly and wheat acreage harvested for grain declined 53 percent. Except for 1978, the winter wheat crop was the smallest since 1957. Extremely wet field conditions during the fall of 1984 reduced planted acreage dramatically and was the reason for the decrease in production.

Conditions for planting the 1985 corn crop were generally excellent. Planting made good progress during late April and May. Planting was generally a week ahead of schedule and virtually complete by early June. Growing conditions were ideal during the summer months in almost all parts of the state. The crop progressed ahead of average during June and July, while a cool August slowed crop development somewhat. Harvest progressed normally during the latter part of September and most of October. While showers did cause short delays in harvest during October, heavier rains in November slowed harvest noticeably. Fields in the extreme north and southern part of the state as well as the west-central part of the state became wet and soft enough so that farmers had to wait for the ground to freeze to complete harvest.

Soybean planting proceeded well during May and was virtually complete by mid-June. Growing conditions during the summer were generally excellent with the crop developing ahead of average. Harvest began with good progress being made the latter part of September. Frequent showers in October delayed harvest with field conditions becoming worse in November due to heavier rains. As with corn, conditions were worse in the extreme north and southern areas as well as the west-central part of the state. Many fields could not be harvested until December when the ground froze.

**Livestock.** A second major determinant in farm income is the price farmers receive for livestock and livestock products. In 1985, the average prices received by farm recordkeepers in the Illinois FBFM Association were 8 percent lower for hogs, 11 percent lower for fed cattle, and 2 percent lower for milk

(Table 1). The prices paid for all weights of feeder cattle and feeder pigs averaged 1 percent below the 1984 price for feeder cattle and 1 percent above the 1984 price for feeder pigs. Although feed costs were less, lower cattle prices received resulted in a 57 percent decrease in returns above feed and purchased animals for the feeder cattle enterprise (see Table 9). Hog prices received and feed costs declined about the same amount resulting in hog returns similar to 1984 and slightly below the 1981 through 1985 average. Lower feed costs for dairy more than offset the drop in milk prices making dairy returns above feed cost per cow the highest during the five-year period of 1981 through 1985.

### Labor and management income

The average operator's share of labor and management income for 1981-1985 from all northern Illinois record-keeping farms (those north of a line from Kankakee to Moline) was \$-4,904. Operators on 1,577 grain and hog farms in central Illinois had 5-year average earnings of \$3,775 (Table 2). Central Illinois occupies the area between the Kankakee-Moline line on the north and the Mattoon-Alton line on the south. Smaller farms, more livestock with low returns, and variable soil quality in northern Illinois result in smaller earnings from crops and livestock. The farms there typically average 5 to 10 percent lower crop yields than those in central Illinois.

Very low corn yields in 1980 and 1983 had narrowed the difference in earnings between central and northern Illinois grain farms. Record corn and soybean yields in central Illinois in 1985 resulted in this difference in earnings expanding by \$4,347 when comparing the 1980-1984 average with the 1981-1985 average. The record-keeping farms in northern Illinois averaged 485 tillable acres per farm, compared with 566 tillable acres on farms in central Illinois. The labor and management income varies considerably, depending on the location and type of farm. For 1981-1985, operators in southern Illinois averaged \$-10,284 for labor and management. When comparing the 1980-1984 average earnings with 1981-1985, decreases in earnings continued for northern and southern Illinois while central Illinois increased.

In 1985, the labor and management income for all areas of Illinois averaged \$9,035 per farm. This was \$16,008 higher than the 1984 state average and the first time in the last five years that there was a positive return. Changes in the 1985 return varied by location and type of farm. Labor and management income increased in all areas of the state except for the extreme southern section. Central Illinois had the greatest increase. Grain farms were the type of farm that had the greatest increase in income, followed by dairy, hog and beef farms.

**Table 1. Average Prices Received and Paid by Farm Record Keepers**

	1985		1984	
	Northern Illinois	Southern Illinois	Northern Illinois	Southern Illinois
<b>Grain prices per bushel</b>				
Purchased — corn .	\$2.44	\$2.49	\$2.97	\$3.14
Sold — corn . . . . .	2.57	2.56	3.05	3.02
soybeans . . . . .	5.53	5.35	7.40	7.05
wheat . . . . .	3.05	3.19	3.38	3.34
<b>Livestock prices per cwt.</b>				
Hogs, all weights . .	\$43.91		\$47.91	
Fed cattle, all weights . . . . .	57.26		64.41	
Feeder cattle, all weights, prices paid . . . . .	59.73		60.62	
Dairy cattle, all weights . . . . .	44.24		45.11	
Sheep and wool, all weights . . . . .	60.30		63.37	
Milk per cwt. . . . .	12.17		12.37	
Eggs per dozen . . . .	.46		.66	

The income (salary) of the farm operator — whether tenant or part owner — is the return for the labor and management provided by the operator. The level of income received is a measure of overall farming efficiency and includes compensation for the risk involved. The income includes the operator's gross sales and the net change in inventory, reduced by operating expenses, depreciation, a charge for unpaid family labor, 11 percent interest on nonland investment, and a land-use charge equivalent to the average net rent received by landowners for crop-share leases from 1981 to 1984.

Whenever the income figures in Table 2 get below the amounts required for paying living expenses and income and social security taxes, it becomes necessary for the charges deducted for interest on equity capital to be used to pay these expenses. Assuming that \$25,000 would be needed to pay living expenses and income and social security taxes, these five-year average labor and management income figures indicate that the average farm operator's family is using \$20,000 to \$40,000 of the return for equity capital to pay living and tax expense, depending on location and type of farm. This decline in equity is synonymous with the drop in cost basis net worth (no

land value drop included). Off-farm income could be used to offset some of this drop in net worth.

## Family living expenditures

Total cash living expenditures for a sample of 313 central Illinois sole proprietor farm-operator families in 1985 averaged \$24,235 (Table 3). Basically, this represents no change from the 1984 average. Capital purchases for family living expenses of \$2,991 include family share of the auto plus items that exceed \$250 and will last more than one year. Capital purchases when added to the other living expenses were 11 percent of total cash outlay for all family living expenditures for 1985.

The average farmer in this sample paid \$22,144 in interest in 1985 on operating, machinery, and long-term real estate debts. This interest expense was 19 percent of total operating expenses (including interest paid) and 14 percent of total farm receipts, or \$35 per tillable acre farmed in 1985.

The most significant financial facts about 1985 are as follows: net farm plus nonfarm income was greater than total living expense and payments for income and social security tax; liabilities of \$234,155 as of December 31, 1985, were 63 cents for each \$1 of farm only assets, including land at current value, but with machinery at depreciated value; living expenses continue to be held constant and capital purchases remain at minimum levels; amount of money borrowed exceeded principal repayments by \$13,635; and net new savings of \$13,320 was at the highest level of the past four years.

The 1985 records from families with three to five persons were sorted into high one-third and low one-third groups according to the total living expenses (see Table 3). The total cash living expenses for the high-third group averaged \$33,406, compared with \$17,836 for the low-third group. The high-third group farmed 309 more acres than the other group and owned 15 percent of the land farmed; the low-third group owned 22 percent of the land farmed. The results indicate that the low-third group had more nonfarm taxable income. The high-third group had 59 percent more outstanding debt and a higher net farm income.

Living expense included cash expenditures for food, operating expense, clothing, personal items, recreation, entertainment, education, transportation, life insurance, contributions, and medical expenses. The farms contained 63 more tillable acres than the average of all the record-keeping farms in the state. Management was also considered to be slightly above average. Considering these factors, it is estimated that the average total living expense (excluding capital purchases) for all record-keeping families would be about \$19,000 to \$21,000 — 15 to 20 percent below the average of these 313 farms. When the \$8,721

**Table 2. Operator's Share of Labor and Management Income by Size and Type of Farm (1981-1985 Average)**

	Number of acres per farm			
	Under 340	340-649	650+	All
<b>Northern Illinois</b>				
Acres of tillable land.....	224	434	854	485
Labor and management earnings by type of farm				
Grain.....	\$ -3,526	\$ -1,099	\$ -1,453	\$ -1,541
Hog.....	-2,322	-1,085	-10,413	-3,021
Beef <sup>a</sup> .....	-14,795	-21,259	-25,178	-20,824
Dairy.....	-2,978	-9,449	...	-5,508
All.....	-4,037	-4,832	-6,440	-4,904
<b>Central Illinois</b>				
Acres of tillable land.....	253	452	862	566
Labor and management earnings by type of farm				
Grain <sup>b</sup> .....	\$ 1,278	\$ 6,309	\$12,805	\$ 7,987
Grain <sup>c</sup> .....	-1,497	82	3,613	1,618
Hog.....	-458	-5,973	-2,393	-3,899
All.....	148	1,867	7,599	3,775
<b>Southern Illinois</b>				
Acres of tillable land.....	225	499	997	622
Labor and management earnings by type of farm				
Grain.....	\$-5,845	\$ -7,408	\$-14,719	\$-11,055
Hog.....	-4,777	-10,568	...	-8,894
Dairy.....	...	...	...	-6,570
All.....	-5,302	-9,051	-14,719	-10,284

<sup>a</sup> Includes central Illinois.

<sup>b</sup> Highly productive soils with soil-productivity ratings of 86 to 100.

<sup>c</sup> Heavy till and transition soils with soil-productivity ratings of 56 to 85.



**Table 3. Operator Farm and Family Sources and Uses of Dollars on an Average per Family, 1982 to 1985, Central Illinois**

	All records, average per farm				Family of 3 to 5, 1985	
	1985	1984	1983	1982	High-third <sup>a</sup>	Low-third
Number in sample.....	313	286	257	195	72	72
Tillable acres farmed.....	629	602	601	606	800	491
Acres owned.....	119	112	128	122	122	108
Farm assets, January 1 <sup>b</sup> .....	\$368,344	\$411,320	... <sup>c</sup>	... <sup>c</sup>	\$396,199	\$295,494
Farm assets, December 31 <sup>b</sup> .....	374,126	402,024	... <sup>c</sup>	... <sup>c</sup>	401,111	298,589
Liabilities, January 1.....	220,968	212,048	\$227,749	\$210,515	263,001	165,600
Liabilities, December 31.....	234,155	219,049	\$223,757	\$227,064	284,215	175,439
Net farm income.....	25,677	13,573	... <sup>c</sup>	... <sup>c</sup>	29,114	17,713
<b>Source of Dollars</b>						
Net nonfarm income.....	\$ 8,721	\$ 9,208	\$ 6,873	\$ 8,202	\$ 6,911	\$ 10,341
Money borrowed.....	137,065	96,895	81,460	120,741	192,695	92,321
Farm receipts.....	157,042	146,213	148,671	149,695	195,633	122,005
Total sources.....	\$302,828	\$252,316	\$237,004	\$278,638	\$395,239	\$224,667
<b>Use of Dollars</b>						
Interest paid.....	\$ 22,144	\$ 20,651	\$ 22,812	\$ 22,644	\$ 28,822	\$ 16,887
Cash operating expenses.....	96,761	90,621	84,680	90,769	124,481	78,352
Capital farm purchases.....	15,589	15,871	15,338	21,988	16,307	11,832
Payments on principal.....	123,430	90,191	85,006	104,192	171,569	82,023
Income and Social Security taxes...	4,358	4,823	4,255	4,802	4,454	3,122
Net new savings and investment...	13,320	3,446	-1,582	9,599	13,050	12,766
Total living expense.....	24,235	24,247	23,335	22,300	33,406	17,836
Living — capital purchases.....	2,991	2,466	3,160	2,344	3,150	1,849
Total uses.....	\$302,828	\$252,316	\$237,004	\$278,638	\$395,239	\$224,667

<sup>a</sup> Records were sorted into high- and low-third categories according to total noncapital living expenses.

<sup>b</sup> Modified cost basis except bare land values were held at same current value on January 1 and December 31.

<sup>c</sup> Data not available.

net nonfarm income for 1985 is used for living, the remaining \$18,505 must be generated from the farm business. This amounts to \$29 per tillable acre farmed.

## Income changes on Illinois farms

Comparative costs and returns between years and among major types of farming operations in northern and central and southern Illinois are reported in Tables 4, 6, and 7. The separation of farms into northern and central, and southern Illinois is based on soil-type regions dividing the state approximately on an east-west line from Mattoon to Alton. The sample consisted of grain, hog, beef, and dairy farms that were between 340 and 499 acres and averaged 419 acres. Labor available on farms of this size averaged 13 months on grain farms, 20 months on hog farms, 17 months on beef farms, and 25 months on dairy farms. The data in the tables are presented as if the farms were all owner operated. For leased farms, the landlord and tenant shares of the business were combined. Between 55 and 75 percent of the land in Illinois is tenant operated, depending on the location, primarily under crop-share and livestock-share leases.

Size of farm, type of farm, quality of soil, and managerial inputs have been held reasonably constant by the sampling procedure used in selecting farms within each category. Variations among figures for 1984, 1985, and the 5-year average are due to changes in farm prices and to costs, weather, and internal

farming adjustments. The data in Tables 4, 6, and 7 are particularly helpful for evaluating changes in farm costs and returns within a particular size and type of farm, and for making comparisons between types of farming. The data do not reflect overall farming adjustments resulting from the enlargement of farms or major changes in the use of resources.

The figure for net farm income (formerly identified as farm and family earnings) comprises returns to the farm family for all unpaid labor, interest on invested capital, and the managerial inputs used in farming. Changes in the value of farm inventories and that of farm products consumed are included as income. Net farm income is calculated by accounting methods generally comparable to the accrual method used to calculate taxable farm income for the federal income tax. Two important differences occur under the accrual method of income tax accounting — the provision for capital gains on livestock sales and the inclusion of interest paid as a farm expense. Operator's share of net farm income, which is listed for the first time this year, *does* have interest expense deducted from it.

The net farm income figure is the amount available from the farm business to pay for living costs, income and social security taxes, debt repayment, and new investments, and to increase savings. Interest expense must also be paid from total net farm income, but not the operator's share as it is already subtracted out. New capital investments for the farm business have been included with total cash expenditures.

**Table 4. Average Selected Total Farm Items on 340- to 499-Acre Northern and Central Illinois Grain, Hog, and Beef Farms**

	Grain farms			Hog farms			Beef farms		
	1985	1984	1981-85 average	1985	1984	1981-85 average	1985	1984	1981-85 average
Number of farms . . . .	319	336	352	107	145	133	43	34	42
Total acres . . . . .	424	421	423	412	412	412	420	405	412
Soil productivity rating . . . . .	88	88	88	81	80	81	79	80	80
Cash operating income . . . . .	\$ 128,852	\$ 129,003	\$ 131,190	\$ 231,802	\$ 220,395	\$ 225,090	\$ 302,753	\$ 349,234	\$ 324,637
Less purchased feed and livestock . .	513	546	830	63,412	67,270	63,645	168,819	203,813	176,848
Net cash operating income . . . . .	\$ 128,339	\$ 128,457	\$ 130,360	\$ 168,390	\$ 153,125	\$ 161,445	\$ 133,934	\$ 145,421	\$ 147,789
Inventory change . . . .	13,123	-6,459	-284	8,984	1,571	-130	6,495	8,287	-8,551
Farm products used . .	228	297	267	487	600	590	864	837	980
Value of farm production . . . . .	\$ 141,690	\$ 122,295	\$ 130,343	\$ 177,861	\$ 155,296	\$ 161,905	\$ 141,293	\$ 154,545	\$ 140,218
Total operating expenses . . . . .	61,064	61,131	59,727	82,213	76,638	77,043	67,923	74,297	71,356
Annual depreciation . .	16,848	17,335	16,640	30,070	30,209	27,614	25,113	30,346	25,745
<b>Net farm income . . . .</b>	<b>\$ 63,778</b>	<b>\$ 43,829</b>	<b>\$ 53,976</b>	<b>\$ 65,578</b>	<b>\$ 48,449</b>	<b>\$ 57,248</b>	<b>\$ 48,257</b>	<b>\$ 49,902</b>	<b>\$ 43,117</b>
(Operator Share) <sup>a</sup> . . . .	(23,725)	(b)	(b)	(21,866)	(b)	(b)	(10,178)	(b)	(b)
Unpaid labor charge . .	13,497	13,266	13,127	17,314	15,947	16,241	14,977	14,834	14,639
Returns to capital and management . .	50,281	30,563	40,849	48,264	32,502	41,007	33,280	35,068	28,478
Interest charge on capital . . . . .	49,071	53,370	55,054	58,215	62,674	65,172	61,509	70,033	71,368
<b>Management returns . \$</b>	<b>1,210</b>	<b>\$ -22,807</b>	<b>\$ -14,205</b>	<b>\$ -9,951</b>	<b>\$ -30,172</b>	<b>\$ -24,165</b>	<b>\$ -28,229</b>	<b>\$ -34,965</b>	<b>\$ -42,890</b>
Total cash income <sup>c</sup> . .	129,603	126,568	131,275	231,371	219,726	225,354	302,886	348,436	324,701
Total cash expenditures <sup>c</sup> . . . . .	69,268	70,698	72,229	161,513	160,896	162,350	247,882	300,856	266,818
Cash balance . . . . .	\$ 60,335	\$ 55,870	\$ 59,046	\$ 69,858	\$ 58,830	\$ 63,004	\$ 55,004	\$ 47,580	\$ 57,883
Capital purchases . . . .	8,757	9,908	12,183	16,700	16,656	21,604	12,041	22,784	18,792
<b>FARM INVESTMENT</b>									
Livestock inventory . . \$	114	216	172	75,877	71,834	71,429	143,912	148,328	137,277
Grain inventory . . . . .	92,286	90,841	95,322	72,800	64,960	72,414	76,510	74,849	78,157
Remaining capital cost in:									
Machinery and auto	25,092	32,480	35,467	39,278	44,013	46,045	35,463	43,633	45,639
Buildings and fence	21,807	24,749	24,309	62,834	73,143	73,712	43,919	62,587	61,350
Soil fertility . . . . .	43	30	34	177	51	74	0	0	0
Value of land (current basis) . . . . .	837,240	1,000,214	1,150,398	706,552	839,023	679,563	958,508	814,795	945,641
Total farm investment . . . . .	\$ 976,582	\$ 1,148,530	\$ 1,305,702	\$ 957,518	\$ 1,093,024	\$ 1,222,182	\$ 979,367	\$ 1,144,192	\$ 1,268,064
Rate earned on investment, % . . . . .	5.15	2.66	3.13	5.04	2.97	3.36	3.40	3.06	2.25

<sup>a</sup> Interest expense deducted from operator's share only.

<sup>b</sup> Data not available.

<sup>c</sup> Includes sales or purchases of capital items.

Although the cash balance reflects the cash position of the farm business, the figure is influenced by the purchases and sales of feed and livestock and by the changes in liabilities and borrowed funds.

The investment per farm is established as an average of the January 1 and December 31 investments on the farm each year. Physical quantities of grain and livestock are valued at farm market prices. Machinery, buildings, and soil fertility are valued at the remaining capital cost (original cost less depreciation as allowed for income tax deductions to date).

Land is priced at current values. A base land value is established for each farm on the basis of soil-productivity rating that is adjusted to a current value each year by using the April index of land prices in Illinois. The procedure used for adjusting the land value is described in the preceding definitions of soil productivity rating and value of land (current basis). The annual change in land values represents an accounting adjustment to bring land values to current market levels. The land adjustment index for 1985 was 16 percent below that of 1984.

## Northern and central Illinois farms

**Grain farms.** The net farm income for grain farms having no livestock in northern and central Illinois (340-499 acres) averaged \$63,778 in 1985 with operator and landowner shares combined (Table 4). This income is \$19,949 above that of 1984 and \$9,802 above the 1981 to 1985 average. Much of this increase in income is due to the \$13,123 increase in inventory. The major factor contributing to the higher incomes was record high corn and soybean yields. Corn yields were 27 bushels per acre higher than 1984. Operating expenses basically stayed at the same level as in 1984. Prices received for corn and soybeans were 15 to 25 percent lower than the previous year. The year brought some recovery to incomes due to the record yields. Incomes were at the highest level since 1980. Government involvement in agriculture was also very noticeable with a majority of farmers participating in the government acreage set aside program. Low grain prices brought on by large supplies resulted in much of the corn crop being placed under government loan. Even though incomes were somewhat better, capital purchases remained at low levels. Purchases for new equipment and buildings dropped to \$21 per acre, 42 percent below 1980. Management returns of \$1,210 were the first positive management returns since 1979. As in 1984, management returns on this type of farm were higher than any other type of farm in Tables 4, 6 and 7.

A study of the cost to grow corn and soybeans on central Illinois farms is summarized in Table 5. These farms had high soil ratings (soil productivity index 86-100). The farms continued to use 94 percent of their tillable land to grow corn and soybeans, with 49 percent of the acres in corn and 45 percent in soybeans. The table compares 1985 cost per acre with the 1984 cost. In 1985, the total cost averaged \$378 per acre for corn and \$296 for soybeans. From 1984 to 1985, the total cost dropped 1 percent for corn and 3 percent for soybeans.

Nonland costs of \$1.53 per bushel for corn and \$3.33 for soybeans in 1985 are the most relevant costs for continuing production in the short run, especially where land is free of debt. The higher yields in 1985 decreased the cost per bushel. If the 1985 yields had been at the 1982-1985 average of 141 for corn and 44 for soybeans, the total of all costs per bushel would have been \$2.68 for corn and \$6.73 for soybeans. These costs do not include a charge for management.

The cost of fertility for soybeans was allocated on the basis of phosphorus, potassium, and lime removals, with the residual allocated to corn. The total unpaid labor charge was based on the labor available. The nonland interest rate was 11 percent of one-half the average of the beginning- and end-of-year inventory value for the crops on hand plus one half the cash-operating expenses, excluding in-

**Table 5. Average Cost per Tillable Acre to Grow Corn and Soybeans on Central Illinois Grain Farms with No Livestock**

	Corn		Soybeans	
	1985	1984	1985	1984
Number of farms .....	512	486	512	486
Acres grown per farm ...	307	303	283	274
Yield per acre, bu.....	171	141	54	40
<b>Nonland costs</b>				
<b>Variable costs</b>				
Soil fertility.....	\$ 55	\$ 56	\$ 19	\$ 19
Pesticides.....	19	20	18	19
Seed .....	22	22	12	14
Drying and storage ...	21	12	5	3
Machinery repairs, fuel, and hire .....	29	29	26	25
Total, variable costs ...	\$146	\$139	\$ 80	\$ 80
<b>Other nonland costs</b>				
Labor.....	\$ 30	\$ 30	\$ 28	\$ 28
Buildings and storage..	9	10	5	5
Machinery depreciation.....	32	33	26	26
Nonland interest.....	34	39	30	34
Overhead .....	11	11	11	11
Total, other costs.....	\$116	\$123	\$100	\$104
Total, nonland costs ..	\$262	\$262	\$180	\$184
<b>Land costs</b>				
Taxes.....	\$ 22	\$ 23	\$ 22	\$ 23
Adjusted net rent.....	94	98	94	98
Total land costs .....	\$116	\$121	\$116	\$121
<b>Total, all costs .....</b>	<b>\$378</b>	<b>\$383</b>	<b>\$296</b>	<b>\$305</b>
Nonland cost per bu. ...	\$ 1.53	\$ 1.86	\$ 3.33	\$ 4.62
Total, all costs per bu. ...	\$ 2.21	\$ 2.72	\$ 5.48	\$ 7.65
.....				
Avg. yield, past 4 years ..	141	134	44	42
Total, all costs per bu. ...	\$ 2.68	\$ 2.86	\$ 6.73	\$ 7.26

terest paid, plus the depreciated value of machinery and buildings. The adjusted net rent was the average net rent received by crop-share landlords as reported on record-keeping farms for 1982-1984.

**Hog farms.** The net farm income for hog farms in northern and central Illinois (340-499 acres) in 1985 averaged \$65,578, with operator and landowner shares combined (Table 4). Net incomes were \$17,129 higher than 1984 and \$8,330 above the 1981-1985 average. The 8 percent lower average selling price for hogs was offset by lower feed costs and the 30 bushel per acre higher corn yield. Operating expenses increased 7 percent while the value of farm production increased 15 percent. Feed purchases decreased 10 percent from 1984 due to a more abundant supply on the farm.

Management returns increased by \$20,221 over 1984 but were still a negative \$9,951. They were at the second highest level since 1978. Capital purchases were \$46 per tillable acre compared with the 1981-1985 average of \$60. The average number of litters farrowed was 185 while producing the most pounds of pork in the last ten years.



As management returns have remained low, investment in new capital has declined. Average annual farm investment in machinery and buildings has dropped since 1979 with the 1985 average investment 26 percent below that of 1979. Rate earned on total farm investment did increase in 1985 to 5.04 percent, the highest level since 1978.

**Beef farms.** The net farm income for beef farms in northern and central Illinois (340-499 acres) averaged \$48,257 in 1985, with operator and landlord shares combined (Table 4). This is about the same as the 1982, 1983, and 1984 incomes and \$5,140 above the 1981 to 1985 average. Higher grain yields on these farms were offset by lower selling prices for fed cattle. Value of farm production decreased 9 percent while total operating expenses decreased 9 percent and depreciation decreased 17 percent. These farms produced 1,807 hundredweight of beef per farm, or weight-in-gain equivalents of 361 head at 500 pounds of gain per head.

Management returns for these farms, which continued to be very low, were a negative \$28,229 for 1985. Only once in the last ten years have management returns been positive for these farms, that being in 1978 when they were \$3,704. While other farm types have had negative management returns since 1974, none were to the extent that these beef farms have experienced. These low returns will draw very little new capital into these farms. One indication of this is the decrease in capital purchases in 1985. The \$12,041 of capital purchases in 1985 was only 53 percent of the amount in 1984 and 64 percent of the average purchases for 1981 to 1985. These low returns reflect fundamental changes taking place that require adjustments either in the supply of beef being produced, in the cost of production, or in the quality of the product being produced.

Cost and returns to produce beef from 1982 to 1985, based on a detailed breakdown of individual costs from a selected sample of beef farms, are shown in Table 13. Note that interest is the second highest expense next to feed. This analysis is discussed in detail under the livestock section on feeder cattle enterprises. Since 1979, interest costs have continued to plague beef farms while average selling prices have remained steady to a bit lower. The average rate earned on the investment of 3.40 percent in 1985 on these farms was lower than any other type of northern Illinois farm. The 5-year average of only 2.25 percent may be low enough to convince some Illinois beef producers to consider changing their present feeder operation or their choice of enterprise.

The data indicate that most farms on which beef cattle are raised or fed continue to compete for resources in Illinois where nonmarketable resources such as roughage, labor, and buildings, or very high levels of management are available. Unless the corn-beef livestock feeding ratios improve considerably, we

can expect to see this type of farm survive primarily where there are large amounts of debt-free capital that can be combined with very high levels of management.

**Dairy farms.** The net farm income for dairy farms in northern and central Illinois (340 to 499 acres) averaged \$52,440 in 1985, with operator and landlord shares combined (Table 6). This is \$13,166 or 34 percent above 1984 and the highest level in the past four years. It is also \$5,277 above the average for 1981 to 1985. Average number of cows on these farms dropped from 67 to 64, the first decline in five years. Higher levels of culling have probably occurred due to narrower profit margins.

Increased income was due to a combination of a higher value of farm production due to better grain yields, lower operating expenses due to less feed costs, and less depreciation. The interest charge on capital along with the labor cost continue to be the largest

**Table 6. Average Selected Total Farm Items on 340- to 499-Acre Northern Illinois Dairy Farms**

	1985	1984	1981-85 average
Number of farms .....	40	36	47
Total acres .....	401	400	403
Soil-productivity rating ....	69	71	71
Cash operating income ... \$	178,083	\$ 194,039	\$ 187,550
Less purchased feed and livestock .....	26,931	35,405	31,365
Net cash operating income .....	\$ 151,152	\$ 158,634	\$ 156,185
Inventory change .....	9,330	-2,223	404
Farm products used .....	1,868	2,468	1,507
Value of farm production ... \$	162,350	\$ 158,879	\$ 158,096
Total operating expenses ..	81,441	85,830	80,926
Annual depreciation .....	28,469	33,775	30,007
<b>Net farm income .....</b>	<b>\$ 52,440</b>	<b>\$ 39,274</b>	<b>\$ 47,163</b>
(Operator's Share) <sup>a</sup> .....	(15,289)	(b)	(b)
Unpaid labor charge .....	19,838	20,319	20,043
Returns to capital and management .....	32,602	18,955	27,120
Interest charge on capital ..	51,251	61,396	62,159
<b>Management returns .....</b>	<b>\$ -18,649</b>	<b>\$ -42,441</b>	<b>\$ -35,039</b>
Total cash income <sup>c</sup> .....	183,337	191,830	188,223
Total cash expenditures <sup>c</sup> ..	124,073	136,973	136,627
Cash balance .....	\$ 59,264	\$ 54,857	\$ 51,596
Capital purchases .....	16,938	17,698	24,955
<b>FARM INVESTMENT</b>			
Livestock inventory .....	67,724	\$ 80,874	\$ 75,845
Grain inventory .....	56,242	58,849	61,169
Remaining capital cost in:			
Machinery and auto ....	41,424	55,789	58,939
Buildings and fence .....	80,313	90,160	85,678
Soil fertility .....	2	6	4
Value of land (current basis) .....	530,957	667,439	759,722
Total farm investment .....	\$ 776,662	\$ 953,117	\$ 1,041,357
Rate earned on investment, % .....	4.20	1.99	2.60

<sup>a</sup> Interest expense deducted from operator's share only.

<sup>b</sup> Data not available.

<sup>c</sup> Includes sales or purchases of capital items.

expense items next to feed in the cost to produce milk (Table 15). Although management returns were a negative \$18,649, they were at the highest level in the last five years. They were \$16,390 above the average for 1981 to 1985.

The 1985 rate earned on investment for these farms rebounded to 4.20 percent from 1.99 percent in 1984. The 1981 to 1985 average rate earned on investment is still at a low level of 2.60 percent. This average percent is above only beef farms when compared with other northern Illinois farm types. As milk support prices continue to decline, adjustments on dairy farms will be necessary to reduce production or lower per unit production costs until dairy supplies

are reduced substantially. The government dairy herd buy out program may only provide short term relief to the continual milk surplus problem that exists in the dairy industry.

The price received for beef from all animals and vealers from the dairy herd can be an important factor in determining total returns. When beef prices were high, those sales accounted for as much as 20 percent of the total income from the dairy enterprise, as they did in 1978 and 1979. But when the beef prices are low, as they were from 1975 to 1977 and again since 1980, this source of income has dropped to only 10 to 12 percent of the total.

**Table 7. Average Selected Total Farm Items on 340- to 499-Acre Southern Illinois Grain, Hog, and Dairy Farms**

	Grain farms			Hog farms			Dairy farms		
	1985	1984	1981-85 average	1985	1984	1981-85 average	1985	1984	1981-85 average
Number of farms .....	100	103	119	41	57	60	38	44	40
Total acres .....	432	424	423	412	407	416	395	399	400
Soil productivity rating <sup>a</sup> .....	61	61	61	60	59	60	60	61	61
Cash operating income .....	\$ 98,565	\$ 88,535	\$101,434	\$172,959	\$171,883	\$182,924	\$188,688	\$185,782	\$191,649
Less purchased feed and livestock ..	6,855	4,427	6,700	56,042	65,771	60,476	38,745	40,724	37,453
Net cash operating income .....	\$ 91,710	\$ 84,108	\$ 94,734	\$116,917	\$106,112	\$122,448	\$149,943	\$145,508	\$154,196
Inventory change .....	6,100	-3,172	-2,411	6,254	5,379	1,257	15,604	-3,302	53
Farm products used ..	687	767	921	771	909	991	2,004	1,742	1,578
Value of farm production .....	\$ 98,497	\$ 81,703	\$ 93,244	\$123,942	\$112,400	\$124,696	\$167,551	\$143,948	\$155,827
Total operating expenses .....	47,694	47,142	47,626	62,018	59,758	62,015	77,089	72,089	75,031
Annual depreciation ..	15,822	16,400	16,229	21,703	23,138	22,714	32,028	36,211	32,221
<b>Net farm income .....</b>	<b>\$ 34,979</b>	<b>\$ 18,161</b>	<b>\$ 29,389</b>	<b>\$ 40,221</b>	<b>\$ 29,504</b>	<b>\$ 39,967</b>	<b>\$ 58,434</b>	<b>\$ 35,648</b>	<b>\$ 48,575</b>
(Operator's Share) <sup>a</sup> ..	(11,197)	(b)	(b)	(16,043)	(b)	(b)	(27,948)	(b)	(b)
Unpaid labor charge ..	14,145	13,665	13,626	16,021	14,931	15,302	19,777	17,675	18,448
Returns to capital and management ..	20,836	4,496	15,763	24,200	14,573	24,665	38,657	17,973	30,127
Interest charge on capital .....	31,131	33,413	35,813	38,055	40,682	44,649	43,270	50,788	52,583
<b>Management returns</b> .....	<b>\$-10,295</b>	<b>\$-28,917</b>	<b>\$-20,050</b>	<b>\$-13,855</b>	<b>\$-26,109</b>	<b>\$-19,984</b>	<b>\$-4,613</b>	<b>\$-32,815</b>	<b>\$-22,456</b>
Total cash income <sup>c</sup> ..	98,519	89,225	101,936	174,827	172,066	183,573	190,432	185,912	192,736
Total cash expenditures <sup>c</sup> .....	62,603	60,749	65,671	130,141	135,047	137,689	128,174	128,913	134,073
Cash balance .....	\$ 35,916	\$ 28,476	\$ 36,265	\$ 44,686	\$ 37,019	\$ 45,884	\$ 62,258	\$ 56,999	\$ 58,663
Capital purchases .....	8,420	10,987	11,894	12,184	9,961	15,518	13,562	17,529	24,422
<b>FARM INVESTMENT</b>									
Livestock inventory ...	\$ 8,356	\$ 7,801	\$ 9,669	\$ 57,297	\$ 56,790	\$ 56,653	\$ 81,497	\$ 80,327	\$ 80,258
Grain inventory .....	48,232	45,933	51,675	45,176	38,295	47,632	47,786	44,747	50,094
Remaining capital cost in:									
Machinery and auto	23,918	31,310	36,644	27,752	35,025	40,622	42,869	62,183	61,459
Buildings and fence	12,092	12,896	13,965	29,776	34,620	39,359	38,523	45,974	50,299
Soil fertility .....	6	9	51	67	196	290	81	83	44
Value of land (current basis) .....	495,507	579,312	665,972	458,149	520,147	618,303	429,593	560,558	614,848
Total farm investment	\$588,111	\$677,261	\$777,976	\$618,217	\$685,673	\$802,859	\$640,349	\$793,872	\$857,002
Rate earned on investment, % .....	3.54	.66	2.03	3.91	2.13	3.07	6.04	2.26	3.52

<sup>a</sup> Interest expense deducted from operator's share only.

<sup>b</sup> Data not available.

<sup>c</sup> Includes sales or purchases of capital items.

## Southern Illinois farms

**Grain farms.** The net farm income for grain farms in southern Illinois (340 to 499 acres) averaged \$34,979 in 1985, with landlord and operator shares combined (Table 7). This income is \$16,818 above 1984 and \$5,590 or 19 percent above the average for 1981 to 1985. Higher grain yields more than offset lower selling prices resulting in a higher value of production. The sum of operating expenses and depreciation for 1985 were basically the same as 1984. Inventory value increased \$9,272 as compared to 1984. This was typical for all grain farms in Illinois last year.

The effect of low incomes since 1980 is evident in spending patterns. To balance cash flow, farmers reduced spending wherever possible. The most obvious example of this is the continued reduction in capital expenditures. Spending for capital items has declined steadily since 1981, when they were \$16,438 or \$43 per tillable acre. In 1985, capital purchases totalled \$8,420 or \$21 per tillable acre, 51 percent less than 1981. Declines in depreciation are now occurring due to this reduction in machinery and building purchases.

Management returns for these farms were at the highest level in five years, but were still a negative \$10,295. Rate earned on investment increased in 1985 to 3.54 percent from the very low level in 1984 of only 0.7 percent. The 3.54 percent earned in 1985 was above the 1981 to 1985 average rate earned on investment of 2.03 percent. The sustained low level of incomes since 1980 reflects that fundamental adjustments in new cost-price relationships, especially in the value of land, are taking place.

**Hog farms.** The net farm income for hog farms (344-499 acres) in southern Illinois averaged \$40,221 in 1985, with landlord and operator shares combined (Table 7). This income was \$10,717 higher than 1984 and very close to the 1981 to 1985 average of \$39,967. An 8 percent decline in the selling price for hogs was more than offset by 27 bushel per acre increase in corn yields and 10 bushel per acre increase in soybean yields. Total operating expenses increased 4 percent while depreciation decreased 6 percent. Improved supplies of grain dropped feed purchases by 13 percent.

Although management returns improved, they were still a negative \$13,855. They were \$6,129 above the 1981 to 1985 average of a negative \$19,984. Low returns continue to hold down capital purchases. In 1985, purchases for machinery and buildings were \$12,184 compared with \$20,635 in 1982. Sustained low incomes signal fundamental adjustments in cost-price relationships, especially land values and the ability to reinvest or maintain the existing capital structure in equipment and buildings.

Returns from the hog enterprise tend to supplement the low income from grain production on these farms. Rate earned on investment increased to 3.91 percent in 1985 compared with 2.13 percent in 1984. The 1981 to 1985 average rate earned on investment of 3.07 percent still ranks this type of farm as one that competes better for resources used than the 400 acre grain farm.

**Dairy farms.** The net farm income for dairy farms in southern Illinois (340-499 acres) in 1985 averaged \$58,434, with operator and landlord shares combined (Table 7). This is \$22,786 above 1984 and \$9,859 or 20 percent above the 1981 to 1985 average. Higher grain yields more than offset a 2 percent drop in the price received for milk. The total of operating expenses and depreciation was virtually unchanged from 1984.

The annual increase in operating expenses that occurred in the late 1970s and early 1980s has stabilized over the past few years. Capital purchases for 1985 were only \$13,562, a 73 percent decrease as compared with 1980 and the lowest level in six years. Fundamental adjustments in cost-price relationships are taking place to cope with low demand and surplus supplies of milk. For each \$1 drop in the average price received per hundredweight of milk sold, net income on these farms could decline by \$10,000 per farm. Each 5 percent decrease in nonfeed cost could increase net income by \$4,000 per farm. The adjustments required to make changes of this kind are improving efficiency, reducing cost, diverting resources to produce income from other sources, or being willing and able to accept lower returns for equity capital invested and unpaid family labor.

Management returns for this type of farm were highest in the state in 1985 except for the northern and central Illinois grain farms. Rate earned on investment of 6.04 percent in 1985 on these farms was the highest compared with the other types of farms. The 1981 to 1985 average rate earned on total investment of 3.52 percent is also the highest among the different types of farms listed in Tables 4, 6, and 7. In 1985, the average value of bare land on these southern Illinois dairy farms was \$1,088 per acre, compared with \$1,324 on northern Illinois dairy farms; building investments in 1985 averaged \$104 less per acre.

The average number of milk cows per farm in 1985 was 70 compared with 68 in 1984 and with 70 for the past 5-year average. The average of 70 cows in 1985 was six more than on farms of similar size and type in northern Illinois. Southern Illinois farms increased their number of milk cows by two in 1985 while northern Illinois farms reduced their number of milk cows by three when compared with size of herd in 1984.



## LIVESTOCK ENTERPRISES

The return (per \$100 of feed fed) from various livestock enterprises and the price of corn during each of the past 15 years are given in Table 8. Averages for 15 years and 5 years are also shown. The difference between the average return figure and \$100 feed cost represents the margin available for labor, depreciation on equipment, cash expenses other than feed, and interest on investment and for profit.

The margin needed to cover nonfeed costs varies with the kind of livestock and depends on the proportion of total production costs represented by feed. The 15-year averages (1971-1985) represent the approximate level of return at which farmers have been willing to maintain livestock production. The average may not represent a break-even return on all farms because some farmers may discount market prices for some of the resources used in producing livestock. If

**Table 8. Returns per \$100 Feed Fed to Different Classes of Livestock**

Year	Farrow-to-finish-hogs	Feeder pigs	Feeder cattle bought	Dairy cow herds	Beef cow herds	Poultry 2,000+ flocks	Native sheep raised	Yearly price of corn
— dollars —								
1971.....	150	122	156	200	180	135	122	1.27
1972.....	214	171	161	212	208	134	134	1.16
1973.....	192	161	120	177	184	151	123	2.00
1974.....	121	108	64	138	41	125	94	3.00
1975.....	191	158	134	146	95	138	101	2.73
1976.....	152	118	93	168	91	146	105	2.55
1977.....	170	134	116	181	107	124	144	2.07
1978.....	208	151	170	217	199	141	159	2.13
1979.....	136	107	149	220	183	131	148	2.44
1980.....	138	122	111	207	144	118	131	2.80
1981.....	138	115	107	200	100	121	84	2.98
1982.....	213	165	147	205	115	119	83	2.43
1983.....	141	118	134	178	115	112	78	3.06
1984.....	155	140	141	188	105	155	102	3.12
1985.....	166	129	121	202	101	132	130	2.54
<b>Averages</b>								
1971-85....	166	135	128	189	132	132	116	2.42
1971-75....	174	144	127	175	142	137	115	2.03
1976-80....	161	126	128	199	145	132	137	2.40
1981-85....	163	133	130	195	107	128	95	2.83

a farmer already has facilities for livestock, he only needs to cover direct operating costs in order to continue production. However, when he views livestock production as a new or a long-run enterprise, he hopes to cover all costs — fixed and variable. Otherwise he may not undertake the enterprise.

As individual farmers try to increase profits, they tend to curtail livestock production when the return per \$100 of feed fed is below the 15-year average. This tendency on the part of producers causes supplies of livestock products to fluctuate.

The returns from feeder cattle vary greatly from year to year. The long-run averages, shown in Table 9, indicate that the cattle-feeding business is not paying average market rates for all the nonfeed cost resources used, even though returns earned in 1982

and 1984 approached the needed level. Above-average skills are needed in buying, selling, and feeding to meet the competition from other uses for time and money on farms with feeder cattle. It is difficult to identify cyclical income movements over a 15-year period in the beef-cattle industry because it is more complex and adjusts more slowly than other livestock enterprises.

For the beef-herd enterprise, the average returns above cost of feed for 1981-1985 are less than one half the margin needed to cover all nonfeed costs (Table 9). The implication is that the beef enterprise competes most favorably on farms where labor, capital, and management resources are plentiful and where these resources have few alternate uses. In the beef-cow enterprise, returns above the cost of feed per cow averaged \$25 during the last five years. This is far below the 1978-1980 levels and does not meet the direct cash costs per cow of \$29.

Dairy enterprise results made some recovery in 1985 to bring returns above the cost of feed per cow back above the \$1,000 level. The 5-year average of \$1,002 no longer covers all estimated nonfeed costs of \$1,045 for the same period.

In farrow-to-finish hog production, returns tend to follow a noticeably cyclical pattern (Table 8). They tend to exceed the 5-year average for 1 or 2 years and then drop below the average for 1 or 2 years. Returns per \$100 feed fed of \$166 in 1985 were slightly above the 5-year average of \$163.

Raising livestock is becoming more competitive. Average profit margins are narrow. Fewer farmers

**Table 9. Variation in Returns to Livestock Enterprise Units, 1981-1985**

	Farrow-to-finish-hogs (per cwt.)	Feeder pig finishing (per cwt.)	Feeder cattle (per cwt.)	Dairy cattle (cow)	Beef herd (cow) <sup>a</sup>	Poultry laying flock (hen)
<b>Returns above cost of feed and purchased animals</b>						
1981.....	\$11.45	\$ 4.29	\$ 3.41	\$1,035	\$ 1	\$1.48
1982.....	30.43	16.40	19.65	1,043	47	1.90
1983.....	12.68	5.26	16.04	885	51	3.09
1984.....	16.72	10.98	20.39	995	21	4.13
1985.....	16.71	7.00	8.86	1,054	5	1.87
5-year avg.	\$17.60	\$ 8.79	\$13.67	\$1,002	\$ 25	\$2.49
<b>Nonfeed costs, 1981-1985</b>						
Direct cash	\$ 6.35 <sup>c</sup>	\$ 4.00 <sup>b</sup>	\$12.50 <sup>c</sup>	\$ 320 <sup>c</sup>	\$ 29 <sup>b</sup>	\$ .75 <sup>b</sup>
Other costs	12.85 <sup>c</sup>	7.00 <sup>b</sup>	15.90 <sup>c</sup>	725 <sup>c</sup>	185 <sup>b</sup>	2.55 <sup>b</sup>
TOTAL	\$19.20	\$11.00	\$28.40	\$1,045	\$214	\$3.30
<b>Nonfeed cost for future production</b>						
Direct cash	\$ 7.00	\$ 4.75 <sup>d</sup>	\$13.00 <sup>d</sup>	\$ 350	\$ 30	
Other costs	19.00	8.00	17.00	850	200	
TOTAL	\$26.00	\$12.75	\$30.00	\$1,200	\$230	

<sup>a</sup> The feed cost for beef herds includes up to \$60 of hay equivalent from salvage roughage.

<sup>b</sup> Includes veterinary costs, utilities, fuel, and equipment repair costs, depreciation, labor, and other nonfeed costs, including interest on feeder livestock, from Table 6, *Farm Management Manuals* from 1981 to 1985.

<sup>c</sup> Estimates of annual nonfeed costs are based on enterprise cost studies of operative units in 1981 to 1984.

<sup>d</sup> Includes interest on purchase cost, one-third and one-half year.

are willing to stay in business as returns in some enterprises barely cover direct operating costs. Plans for expansion that require large investments for new facilities should be based on an estimated return that is high enough to cover all costs. Fluctuations in livestock returns can involve a risk in low-return years. The estimated nonfeed cost for future livestock production is shown in Table 9.

**Table 10. Hog Enterprises, 1985**

	Farrow to finish		Feeder-pig production
	All farms	200 or more litters per farm	
Number of farms . . . .	709	72	20
<b>Average per farm</b>			
Pork produced, lb. . . .	296,855	924,927	50,530
Pork produced per litter, lb. . . . .	1,756	1,728	472
Total returns . . . . .	\$123,706	\$387,865	\$33,890
Value of feed fed . . . .	\$ 74,093	\$218,896	\$19,882
Returns per \$100 of feed fed . . . . .	\$ 166	\$ 177	\$ 170
No. of litters farrowed .	169	535	107
Pigs farrowed per litter . . . . .	9.37	9.36	10.17
Pigs weaned per litter .	7.68	7.85	7.88
Litters farrowed per female year . . . . .	1.74	1.82	1.85
Pigs weaned per female year . . . . .	13.80	14.74	14.09
No. of pigs weaned . . .	1,298	4,200	843
Death loss, percent of pounds produced . .	1.7	1.8	3.1
Weight per hog sold, lb. . . . .	236	231	46 <sup>a</sup>
Per 100 lb. produced:			
Price received . . . . .	\$ 43.91	\$ 44.25	\$ 84.87 <sup>a</sup>
Total return . . . . .	\$ 41.67	\$ 41.93	\$ 67.03
Feed cost . . . . .	\$ 24.96	\$ 23.67	\$ 39.35
Return above feed . . .	\$ 16.71	\$ 18.26	\$ 27.71
Farm grains, lb. . . .	312	302	349
Commercial feed, lb. . . . .	88	94	148
Total concentrates, lb. . . . .	400	396	497
Cost per 100 pounds of commercial feed . .	\$ 12.21	\$ 10.46	\$ 15.89
Cost per 100 pounds of concentrates . . . .	\$ 6.22	\$ 5.95	\$ 7.90

<sup>a</sup> The average weight sold and price received for the feeder-pig production enterprise is for the feeder pigs only.

## Hog enterprises

The information on farrow-to-finish enterprises in Table 10 is based on a sample of 709 farrowing 10 litters or more per year. Farms were omitted from the sample if the number of hogs purchased exceeded 10 percent of the pigs weaned. This eliminated from the sample those farms with combined farrowing and feeder-pig operations. (Information on feeder-pig finishing enterprises is given in Table 12.) The average size of farrow-to-finish enterprises on all record-keeping farms stayed almost constant at 169 litters in

1985. The 1985 records summarized here for the "all farms" group show that returns above feed costs per 100 pounds of pork produced of \$16.71 was down only one cent from 1984. This is still far below the record high of \$30.43 in 1982 (Table 9).

The 5-year average for returns above feed costs per 100 pounds produced is \$17.60 (Table 9). This figure is only \$2.46 above the 1976-80 average. Detailed cost records show that an average farmer with existing facilities would have needed a return (above feed costs) of \$19.20 per 100 pounds to pay for all nonfeed costs during the past 5 years. The result was a deficit of \$1.60 below all costs during this 5-year period.

The farrow-to-finish enterprise records for 1985 reported in Table 10 were also sorted by the number of litters produced. One group farrowing 350 or more litters averaged 535 litters. The feed cost per 100 pounds of pork produced was \$1.29 lower for the 535 litter group compared with the average for all farms. The large producers paid about \$35 less per ton for commercial feed, and feed conversion was 4 pounds lower. The prices received (net at the farm) for hogs sold by large producers were 34 cents higher than those received by all producers.

A summary of the feeder-pig production enterprises is also reported in Table 10. In 1985 the average enterprise in this group produced 107 litters with a return of \$170 per \$100 of feed fed. On an average, 7.88 pigs per litter were weaned and sold at 46 pounds per head. The 1985 average price received per 100 pounds of feeder pigs sold was \$84.87 or \$39.04 per head. The average feed cost per 100 pounds of pork produced (pigs and breeding stock) was \$39.35 for 497 pounds of concentrate.

A substantial profit margin is required to compensate for the risk and detailed management involved in hog production, compared with the risk and management involved in other uses of the same resources. Large-scale hog production in modern confinement facilities requires high capital investments. The future recovery of this specialized capital investment is uncertain, and the salvage value of confinement hog facilities is low. In addition, acquiring the managerial skills necessary for the large 3-scale production of hogs in confinement may discourage any rapid expansion of large hog-producing units. Pork production appears to have stabilized at more moderate levels, but an apparent change in the consumer demand for both beef and pork continues to inhibit movement at price levels covering all costs.

The data on hog enterprises in Table 11 show a detailed breakdown of costs and returns from a group of specialized commercial hog farms for 1983-1985. The value of the feed fed to hogs was more than 75 percent of the crop returns produced on these farms. This intensity of livestock feeding indicates a commitment of major resources to the hog enterprise.

**Table 11. Costs and Returns for Farrow-to-Finish Hog Enterprises by Size of Enterprise, 1983-1985**

	Under 250 litters			250 litters or more		
	1985	1984	1983	1985	1984	1983
Number of farms .....	59	100	99	79	90	100
<b>Average per farm</b>						
Tillable acres.....	210	283	259	406	492	435
Number of litters .....	149	155	148	423	460	437
	per 100 pounds of pork produced					
Total returns .....	\$ 42.06	\$ 47.25	\$ 42.70	\$ 41.80	\$ 46.49	\$ 43.65
<b>Cash costs</b>						
Feed .....	\$ 27.94	\$ 31.07	\$ 31.43	\$ 24.05	\$ 28.55	\$ 29.19
Operating expenses						
Maintenance and power <sup>a</sup> .....	3.33	3.18	3.69	3.80	3.27	3.59
Livestock expenses.....	1.66	1.97	1.82	1.61	1.59	1.74
Insurance, taxes, and overhead.....	.85	1.00	.96	1.00	.93	1.00
Total operating expenses .....	\$ 5.84	\$ 6.15	\$ 6.47	\$ 6.41	\$ 5.79	\$ 6.33
Total cash costs.....	\$ 33.78	\$ 37.22	\$ 37.90	\$ 30.46	\$ 34.34	\$ 35.52
<b>Other costs</b>						
Depreciation <sup>b</sup> .....	\$ 3.55	\$ 3.95	\$ 3.87	\$ 4.04	\$ 4.17	\$ 4.05
Labor.....	3.81	3.74	4.04	3.27	3.43	3.56
Interest charge on all capital .....	4.98	5.43	5.64	3.93	4.74	5.38
Total other costs .....	\$ 12.34	\$ 13.12	\$ 13.55	\$ 11.24	\$ 12.34	\$ 12.99
Total nonfeed costs.....	\$ 18.18	\$ 19.27	\$ 20.00	\$ 17.65	\$ 18.13	\$ 19.32
Total all costs .....	\$ 46.12	\$ 50.34	\$ 51.45	\$ 41.70	\$ 46.68	\$ 48.51
Return above all costs.....	\$ -4.06	\$ -3.09	\$ -8.75	\$ .10	\$ -.19	\$ -4.86

<sup>a</sup> Includes utilities, machinery, equipment and building repairs, machine hire, and fuel.

<sup>b</sup> Includes machinery, equipment, and building depreciation.

The producers in this group probably exercise a higher level of management and use more confinement production facilities than the average hog producer in Illinois.

The hog enterprise records summarized in Table 11 were sorted by the number of litters produced. The group farrowing less than 250 litters averaged 151 litters from 1983 to 1985, the group farrowing 250 or more litters averaged 440 litters during the same period.

The cost data reported in Table 11 have been divided into two categories: cash costs and other costs. This classification of production costs is important when short-run management decisions are being made concerning the level (volume) of production, particularly during periods of low prices.

As reported in Table 11, cash costs of production in 1985 ranged from approximately \$30 to \$34 per 100 pounds of pork produced. Feed is included as a cash cost, although for most producers a major share of the grains are farm raised. The readily available alternative cash market for grain makes the raised feed the same as cash.

The other costs category includes depreciation, labor, and an interest charge on all capital. Part of the labor and interest charge is a cash cost on most farms. The proportion of labor that is hired depends largely on the size of the farm. A one-man farm does not hire much labor, whereas a major share of the labor will be hired on a four-man farm.

In 1985, a continued decline in operating ex-

penses, depreciation, and the interest charge on all capital when compared with 1984 resulted in lower nonfeed costs for both groups of farms. The group farrowing less than 250 litters averaged \$1.09 lower nonfeed costs than in 1984 and the group farrowing 250 litters or more averaged 48 cents lower nonfeed cost than in 1984. Total costs of production were significantly lower for both groups of farms, because of the lower value on corn fed.

The most significant cost difference between the two groups of farms was the feed cost. The average feed cost for 1983-1985 per 100 pounds of pork produced for the large enterprises was \$2.89 lower than for the small enterprises. Differences in the amount of feed used per 100 pounds of pork produced and the price paid for commercial feeds caused the difference in feed costs.

From 1983-1985, the returns above all costs averaged a negative \$5.30 per 100 pounds of pork produced for the small enterprises and a negative \$1.65 for the large enterprises, a difference of \$3.65. Management practices such as the choice of building systems, method of transporting hogs to market, type of market used, and on-farm versus off-farm systems for feed-processing affect the individual cost items reported in Table 11. However, the return above all costs should accurately reflect the relative efficiency of the two groups of hog enterprises.



## Feeder-cattle and feeder-pig finishing enterprises

Data for 1985 on the feeder-cattle and feeder-pig finishing enterprises are presented in Tables 12 and 13. These enterprise summaries include weights and values on partly finished animals purchased in previous years and on animals purchased during the current year.

The average for pork produced per farm from feeder-pig enterprises was 171,541 pounds in 1985 (Table 12). At 175 pounds of gain per head, this amounted to 980 head fed per farm in 1985, up from the 867 head fed per farm in 1984.

The return above the cost of feed and purchased animals for 1981-1985 averaged \$8.79 per 100 pounds of gain. This compares with a return of \$11.00 required to cover all nonfeed costs for the past 5 years and an estimated \$12.75 required to cover costs for future production (Table 9).

Assuming that a 500-pound unit of gain equals one head of feeder cattle, the average of 151,859 pounds of beef produced per farm in 1985 (Table 12) equals 304 head of feeder cattle per farm. That is an increase of 22 above the average of 282 head fed per farm in 1980. The return per \$100 of feed

**Table 12. Feeder-Cattle and Feeder-Pig Finishing Enterprises, 1985**

Items	Feeder cattle	Feeder-pig finishing
Number of farms.....	245	150
<b>Average per farm</b>		
Total pounds produced.....	151,859	171,541
Total returns.....	\$ 75,407	\$ 52,062
Value of feed fed.....	\$ 61,955	\$ 40,049
Returns per \$100 feed fed.....	\$ 121	\$ 129
Death loss, percent of		
lb. produced.....	1.9	1.8
Average weight purchased.....	624	50
Price paid per 100 pounds.....	\$ 59.73	\$ 86.79
Price received per 100 pounds...	\$ 57.26	\$ 44.48
Average weight sold.....	1,075	234
<b>Per 100 pounds produced:</b>		
Total returns.....	\$ 49.66	\$ 30.35
Feed cost.....	\$ 40.80	\$ 23.35
Return above feed.....	\$ 8.86	\$ 7.00
Farm grains, lb.....	521	303
Commercial feeds, lb.....	60	79
Total concentrates, lb.....	581	383
Hay, lb.....	75	...
Corn silage, lb.....	645	...
Other silage, lb.....	164	...
Hay equivalent, lb.....	200	...

**Table 13. Costs and Returns for Beef Feeding Enterprises, 1982-1985**

	1985	1984	1983	1982	Average 1982-85
Number of farms.....	46	58	56	63	55
<b>Average per farm</b>					
Tillable acres.....	505	541	488	474	502
Hundredweight beef produced.....	2,911	2,570	2,497	2,402	2,595
Number head @ 475-lb. gain equivalents..	613	541	526	506	547
Average weight purchased, lb.....	650	619	618	596	621
Average weight sold, lb.....	1,116	1,088	1,070	1,056	1,083
Price received per 100 lb. sold.....	\$ 57.58	\$ 64.46	\$ 61.25	\$ 63.07	\$ 61.59
Price paid per 100 lb. purchased.....	61.48	61.58	60.44	62.46	61.49
<b>per 100 pounds of beef produced</b>					
Cash costs					
Feed <sup>a</sup> .....	\$ 41.26	\$ 48.67	\$ 48.83	\$ 41.32	\$ 45.02
Operating expenses					
Maintenance and power <sup>b</sup> .....	3.97	4.30	4.54	4.65	4.36
Livestock expense.....	2.04	2.04	1.81	1.82	1.93
Insurance, taxes and overhead.....	1.49	1.47	1.25	1.26	1.37
Interest on cattle <sup>c</sup> .....	8.14	8.22	8.22	9.39	8.49
Total operating expense.....	\$ 15.64	\$ 16.03	\$ 15.82	\$ 17.12	\$ 16.15
Total cash costs.....	\$ 56.90	\$ 64.70	\$ 64.65	\$ 58.44	\$ 61.17
Other costs					
Depreciation <sup>d</sup> .....	\$ 5.09	\$ 5.36	\$ 5.45	\$ 5.13	\$ 5.26
Labor.....	2.19	2.31	2.37	2.30	2.29
Interest on other capital.....	3.11	4.03	4.04	4.34	3.88
Total other costs.....	\$ 10.39	\$ 11.70	\$ 11.86	\$ 11.77	\$ 11.43
Total all costs.....	\$ 67.29	\$ 76.40	\$ 76.51	\$ 70.21	\$ 72.60
Total returns <sup>e</sup> .....	\$ 51.78	\$ 69.38	\$ 64.20	\$ 62.68	\$ 62.01
Return above all costs.....	\$ -15.51	\$ -7.02	\$ -12.31	\$ -7.53	\$ -10.59

<sup>a</sup> All grain fed was priced at average market price for the year. Market values were used for roughage fed while protein and minerals were charged at cost. Assumes all feeds fed were marketable.

<sup>b</sup> Includes utilities, machinery, equipment and building repairs, machine hire and fuel.

<sup>c</sup> Interest is a charge on average value of beginning- and end-of-year inventories on hand. Rate was 14% for 1982, 12% for 1983, 12% for 1984, and 11% for 1985.

<sup>d</sup> Includes machinery, equipment, and building depreciation.

<sup>e</sup> Sales less cost of purchased animals plus or minus inventory value change. No credit has been calculated for reduced fertility cost for manure applied to crops.

for feeder-cattle enterprises was \$121 in 1985 compared with both a 5- and 15-year average of \$130 and \$128 respectively (Table 8).

The price paid for feeders was \$.89 per 100 pounds less in 1985 than in 1984; the price received for cattle sold in 1985 was \$7.15 lower than in 1984. The average weight of animals purchased and sold increased about 25 pounds to 624 and 1,075 pounds respectively. Feed cost was \$40.80 per 100 pounds produced in 1985, compared with \$49.41 in 1984.

Each 100 pounds of beef produced required 581 pounds of concentrates and 75 pounds of hay. The amount of corn silage used in 1985 averaged 645 pounds; other silage averaged 164 pounds, making a total of 809 pounds. Silage utilization by the feeder-cattle enterprise has remained relatively constant since 1971, with a 10-year average (1976-1985) of 933 pounds per 100 pounds of beef produced. The use of 809 pounds in 1985 was the smallest amount fed since 1971. The end result of this shift has been greater production and utilization of crops from a fixed land resource. The mechanization of the silage-feeding operation has also reduced the labor input per unit of production.

These data do not show the wide variation in profits among cattle-feeding programs. The data in Tables 8, 9, and 12 on Illinois feeder-cattle enterprises reflect the composite results of all qualities and ages of cattle fed. The data are heavily weighted, with good to choice calves and yearlings as the predominant cattle-feeding system. Most farmers now feed more than one drove of cattle each year to better utilize their fixed investments in mechanized feedlots.

The return above the cost of feed and purchased animals averaged \$13.67 per 100 pounds of beef produced for 1981-1985 (Table 9). During this period, returns ranged from \$3.41 in 1981 to \$20.39 in 1984. The returns above feed costs have remained below the estimated costs required to pay for all nonfeed costs for the average cattle feeder over the last 5 years, with 1985 returns slipping well below the 1982-1984 results.

The data in Table 13 on feeder cattle enterprises show a detailed breakdown for 1982 through 1985 on cost and returns to produce beef on beef-feeding farms. The farms included had no other livestock. All total costs were accounted for either in crops or in the beef enterprise. Feed costs assume that all the grain and roughage fed that was produced on the farm was marketable.

The data show that these farms were finishing an average of 547 feeders each year in this 1982 through 1985 period. The 1982-1985 average total cash cost including feed and interest charged on cattle was \$61.17 per 100 pounds of beef produced. The average total return of \$62.01 for the same period exceeded total cash costs by only 84 cents per 100 pounds produced, or \$4 per feeder. Some feeders

may be able to discount some of these cash costs for roughage fed and for interest on cattle if they had no market for the roughage or were able to use their own money invested in cattle without paying interest. The total costs include depreciation, labor, and interest of \$11.43 per 100 pounds of beef produced or \$53 per feeder (\$11.43 x 4.62 hundredweight of gain per feeder).

A number of cattle feeders in Illinois apparently will feed cattle if their return covers feed and cash costs but is short of paying market rates for some nonmarketable roughage, and fixed and overhead costs. However, this number is expected to decline.

Farmer's values, goals, and attitudes have been important in maintaining production; but the dictates

**Table 14. Dairy Cattle Enterprises, 1985**

	All farms	Efficiency	
		High <sup>a</sup>	Low <sup>b</sup>
Number of farms.....	230	75	72
<b>Average per farm</b>			
Number of cows.....	61.6	68.5	56.4
Milk cows dry, %.....	13.7	12.7	15.2
Animal units in herd....	118	135	106
Total returns.....	\$128,615	\$164,908	\$ 97,181
Value of feed fed.....	\$ 63,634	\$ 69,107	\$ 59,631
Returns per \$100 of feed fed.....	\$ 202	\$ 238	\$ 162
Returns above feed per cow.....	\$ 1,054	\$ 1,398	\$ 665
Total milk produced, 100 lb.....	9,162	11,268	7,321
Pounds of milk per cow.....	14,873	16,449	12,980
Pounds of butterfat per cow.....	550	608	480
Total beef produced, lb.....	41,676	50,930	32,572
Pounds of beef per cow.....	676	743	577
Death loss, percent of pounds produced....	7.9	6.0	11.4
Price received for:			
100 pounds of milk... \$	12.17	\$ 12.29	\$ 12.01
100 pounds of beef.. \$	44.24	\$ 45.32	\$ 43.39
Per unit of milk and beef: <sup>c</sup>			
Feed cost..... \$	47.73	\$ 42.23	\$ 56.37
Grain, lb.....	321	300	347
Protein and minerals, lb.....	102	98	134
Total concentrates, lb.....	423	398	481
Hay and dry roughage, lb.....	297	238	400
Corn silage, lb.....	570	513	646
Other silage, lb.....	478	431	576
Pasture (pasture-days).....	...	...	...
Pasture-days per animal unit.....	6	2	9
Hay equivalent per cow, tons.....	7.7	7.2	8.3
Concentrates per cow, lb.....	9,151	9,508	9,021

<sup>a</sup> High one-third return above feed per cow exceeds 1,184.

<sup>b</sup> Low one-third dairy return above feed per cow is below 873.

<sup>c</sup> 1,000 pounds of milk or 100 pounds of beef.

of the market, technological changes, and shifts in basic supply and demand factors are causing changes. The return reflected in these averages for the feeder cattle enterprise suggests that for cattle feeding to be profitable, farmers must produce the kind of beef the consumer wants at the lowest possible cost. Even though farms may have nonmarketable feeds, un-employed labor, or fixed capital investments in facilities, these data indicate current returns are not enough to justify the building of new facilities.

## Dairy enterprises

The minimum size for a herd included in this analysis was 10 milk cows. The average herd size on record-keeping farms increased steadily at an average of 1.8 cows per year from 42 in 1970 to 63 in 1982. Herd size remained steady in 1985 at 62 cows.

The return per \$100 of feed fed to dairy cattle in 1985 was \$202. The average for 1981-1985 was \$195 (Table 8). In 1983, 1984, and 1985, milk prices per hundredweight decreased 2 percent each year. This compares with an average annual increase of 6 percent from 1976 to 1982 and 10 and 14 percent increases in 1978 and 1979. Beef prices for all weights ~~also dropped 67 cents per hundred pounds~~, but feed costs decreased \$5.61 per unit of milk or beef produced from 1984 to 1985.

Dairy farmers have reduced the amount of pasture and dry hay and have increased the amounts of

grain and silage fed over the past two decades. Pasture days per animal unit dropped from 145 in 1960 to 50 in 1970 to only 6 in 1985. This shift indicates that significant pasture days are a thing of the past on nearly all dairy farms in this sample.

The dairy herds in Table 14 were subdivided into two groups according to their efficiency as measured by returns above the cost of feed per cow. The high efficiency group, when compared with the low group, had more cows in the herd, fewer dry cows, and about double the returns above feed per cow, \$1,398 compared with \$665. The following factors were most significant: 28 percent higher milk production per cow, an average of 16,649 compared with 12,980 pounds, and a 25 percent lower feed cost per unit of milk and beef produced.

The average return above feed costs per cow for all dairy herds was \$1,054 in 1985 (Table 14). This compares with the 5-year average of \$1,002 per cow (Table 9). The 5-year average return above feed cost required to pay market prices for all nonfeed costs is estimated to be about \$1,045 per cow. The estimated return above feed costs currently required to attract new investments for dairy herds is about \$1,200 per cow. The high returns above feed costs per cow from 1979 to 1982 allowed many dairy farmers to expand or replace their less efficient facilities. As dairy herds have decreased in number and as their size and efficiency have increased, they have continued to increase the milk supply.

**Table 15. Milk Production Costs and Returns by Size of Herd, 1983-1985**

	40 to 79 cows in herd			80 or more cows in herd		
	1985	1984	1983	1985	1984	1983
Number of farms .....	138	132	150	46	45	61
<b>Average per farm</b>						
Tillable acres.....	284	303	290	428	470	408
Number of cows.....	58.2	57.9	59.2	103.1	106.8	106.8
Milk per cow, lb.....	14,997	14,356	14,349	15,313	14,856	14,857
	<b>per 100 pounds of milk produced</b>			<b>per 100 pounds of milk produced</b>		
Price received.....	\$ 12.28	\$ 12.43	\$ 12.65	\$ 12.28	\$ 12.69	\$ 12.58
Cash costs						
Feed .....	\$ 5.95	\$ 6.81	\$ 6.70	\$ 5.91	\$ 6.69	\$ 6.56
Operating expenses						
Maintenance and power <sup>a</sup> .....	1.32	1.31	1.22	1.34	1.37	1.20
Livestock expense.....	.92	.89	.86	1.03	.94	.87
Insurance, taxes, and overhead.....	.31	.33	.31	.26	.25	.26
Total operating expenses .....	\$ 2.55	\$ 2.53	\$ 2.39	\$ 2.63	\$ 2.56	\$ 2.33
Total cash costs.....	\$ 8.50	\$ 9.34	\$ 9.09	\$ 8.54	\$ 9.25	\$ 8.89
Other costs						
Depreciation <sup>b</sup> .....	\$ 1.31	\$ 1.36	\$ 1.25	\$ 1.25	\$ 1.31	\$ 1.08
Labor.....	1.97	1.94	1.97	1.63	1.65	1.70
Interest charge on all capital .....	1.75	2.22	2.32	1.70	2.04	2.19
Total other costs .....	\$ 5.03	\$ 5.52	\$ 5.54	\$ 4.58	\$ 5.00	\$ 4.97
Total nonfeed costs.....	\$ 7.58	\$ 8.05	\$ 7.93	\$ 7.21	\$ 7.56	\$ 7.30
Total all costs.....	\$ 13.53	\$ 14.86	\$ 14.63	\$ 13.12	\$ 14.25	\$ 13.86
Return above all costs.....	\$ -1.25	\$ -2.43	\$ -1.98	\$ -.84	\$ -1.56	\$ -1.28

<sup>a</sup> Includes utilities, machinery, equipment and building repairs, machine hire, and fuel.

<sup>b</sup> Includes machinery, equipment, and building depreciation.



The data in Table 15 on dairy enterprises show a detailed breakdown for 1983 through 1985 on milk production costs and returns for dairy farms, by the number of cows in the herd. The farms included had no other livestock. All total costs were accounted for either in crops or in the dairy enterprise. The total costs for the dairy enterprise were reduced by the amount of income derived from sales or from an inventory increase in the pounds of beef produced, which was valued at the average price received for all weights of dairy animals sold in 1982-1985. The residual costs, amounting to 87 percent of the total enterprise costs, were then considered as the net cost of producing milk.

The most significant differences between the herds containing 40 to 79 cows and those with more than 79 for 1982-1985 were the averages for pounds of milk produced per cow and labor costs per 100 pounds of milk produced. The large herds produced a 3-year average of 442 more pounds of milk per cow. They also averaged a 30 cent lower labor cost per 100 pounds of milk produced in this period.

In 1985, the total of all costs decreased 8 to 9 percent primarily because of decreases in the value of feed fed. The average price received for milk sold declined significantly for the large herds to the place where the average price was identical for both groups. Interest charges continued to decline in 1985 and were replaced by labor costs as the highest non-feed cost for producing milk in the 40 to 79 group. Feed now averages 44 percent of the total cost compared with about 50 percent in 1979. The negative management returns that began in 1980 were not quite as large in 1985 as in 1984. Thus, even though the decline in value of feed fed was substantial, total costs continued to exceed total returns. However, the large herd group has averaged 66 cents per year more returns above all costs per 100 pounds of milk produced for this period than the small herd group. Like most livestock farmers, the dairy farmers who have large amounts of unpaid family labor and who use small amounts of borrowed money are in the best position to withstand long periods of negative profit margins.

### Beef-cow herds

The minimum size for a beef-cow herd included in Table 16 was 10 cows. Farms combining cow herds and purchased feeder cattle were not included. In addition to all farms, Table 16 gives an analysis of cow herds in which calves were sold at weaning time, comparing them with those in which calves were finished to slaughter weights. From 1956-1969, the average size of the herd on all farms ranged from 25 to 30 cows. From 1969 to 1973, the average grew to about 40 cows per herd and remained stable through 1979. From 1980 to 1982 the herd size

**Table 16. Beef-Cow Enterprises, 1985**

	All farms	Calves sold	Calves fed out
Number of farms.....	315	143	132
<b>Average per farm</b>			
Number of cows in herd.....	39	37	40
Animal units in herd....	61	52	71
Total pounds produced..	27,770	20,005	35,350
Beef per cow in herd, lb.....	712	540	883
Total returns.....	\$13,965	\$10,119	\$17,710
Value of feed fed.....	\$13,749	\$10,094	\$17,622
Returns per \$100 of feed fed.....	\$ 101	\$ 100	\$ 100
Returns above feed per cow.....	\$ 5	\$ 1	\$ 2
Death loss, lb.....	1,454	1,461	1,612
Percent of pounds produced.....	5.2	7.3	4.5
Price received per 100 lb. sold.....	\$ 54.30	\$ 54.82	\$ 53.62
<b>Per 100 pounds produced:</b>			
Feed cost.....	\$ 49.51	\$ 50.45	\$ 49.85
Grain, lb.....	259	131	333
Protein and minerals, lb.....	38	34	43
Total concentrates, lb.....	297	165	376
Hay and dry roughage, lb.....	655	879	537
Corn silage, lb.....	439	379	520
Other silage, lb.....	43	20	50
Pasture-days.....	30	39	25
Pasture-days per animal unit.....	138	150	127
Hay equivalent per cow, tons.....	5.5	5.2	5.9

increased to 43-45 cows, but in 1983 dropped back to about 40 cows and has remained there. Most Illinois farmers who maintain a beef-cow herd do so as a supplemental enterprise to market nonsalable feeds and labor.

The return per \$100 of feed fed to beef-cow herds averaged \$101 in 1985. The return from 1981-1985 averaged \$107, which is below the 15-year 1971-1985 average of \$132 (Table 8). Beef prices received in 1985 averaged \$54.30 per hundred-weight, down about \$2 from 1984. Feed costs per 100 pounds of beef produced decreased by \$2.25 to \$49.51.

Since 1981 the return above feed cost per cow for the average farmer to feed out calves rather than selling the calves at weaning has been about \$12 per cow. Additional returns are needed for the added costs of labor, buildings, and the capital required to feed out the calves. In 1985, return above feed cost for feeding calves to market weight was only \$1 more per cow than for selling calves.

## Poultry enterprises

The minimum size of the flock that is included in Table 17 is 2,000 hens. The flocks averaged 10,288 hens. Poultry in Illinois is now primarily concentrated in fewer but larger operations that are more industrialized.

These relatively large commercial flocks used 4.86 pounds of feed concentrates per dozen eggs produced or per 1.5 pounds of weight produced. For 1985, the feed cost per dozen eggs was 29 cents. Egg prices averaged 46 cents per dozen in 1985.

In 1985, the return above feed costs per hen was \$1.87, compared with the 5-year average of \$2.49 (Table 9). About a third of these farms sold a major share of their eggs through retail outlets.

**Table 17. Poultry Enterprises, 1985**

	Number of hens per farm 2,000 and over
Number of farms .....	5
<b>Average per farm</b>	
Poultry produced, lb.....	5,670
Total returns from poultry .....	\$ 77,773
Total value of feed fed .....	\$ 58,494
Returns per \$100 of feed fed.....	\$ 132
Returns above feed fed per hen.....	\$ 1.87
Average number of hens .....	10,288
Eggs produced per hen.....	230
Percent production .....	63
Feed units <sup>a</sup> .....	201,472
Feed cost per unit <sup>a</sup> .....	\$ .29
Concentrates per feed unit, lb. ....	4.86
Cost per 100 pounds of concentrates .....	\$ 5.98
Price per dozen eggs sold .....	\$ .46

<sup>a</sup> One dozen eggs or 1.5 pounds of weight produced.

## Sheep enterprises

Sheep production is a minor enterprise on Illinois record-keeping farms. The minimum size of enterprise in Table 18 is three animal units. One animal unit of sheep is defined as 750 pounds, liveweight. The return per \$100 of feed fed in 1985 was \$130 for native flocks. The pounds of wool and mutton produced per farm have remained fairly constant for the past 10 years. The price received for sheep decreased from \$63.37 per hundredweight in 1984 to \$60.30 in 1985. Most Illinois farmers who keep sheep do so as a supplemental enterprise in order to market nonsalable feeds and labor.

**Table 18. Sheep Enterprises, 1985**

	Native flocks
Number of farms .....	48
<b>Average per farm</b>	
Wool and mutton produced, lb. ....	6,395
Total returns .....	\$3,391
Value of feed fed .....	\$2,597
Returns per \$100 of feed fed.....	\$ 130
Percent lamb crop .....	128
Death loss, lb.....	
Percent of pounds produced .....	9.7
Per 100 pounds produced:	
Price received .....	\$ 60.30
Feed cost .....	\$ 40.61
Concentrates, lb. ....	316
Hay, lb. ....	531
Corn silage, lb.....	31
Pasture (pasture-days).....	16
Hay equivalent, lb.....	926

Costs, returns, financial summaries, investments, land use, and crop yields for different sizes and types of farms in northern and central Illinois and southern Illinois are reported in Tables 19 to 27a.

**Table 19. Average Return, Costs, and Financial Summary of Grain Farms by Size and Management Returns, 1985 (High Soil Rating, Northern and Central Illinois)**

GRAIN FARMS WITH SOIL RATING 86-100 NORTH & CENTRAL ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	105	487	141	47		780	122	122
TOTAL ACRES IN FARM	283	538	945	1459	_____	633	514	610
ACRES OF TILLABLE LAND	271	518	908	1407	_____	609	486	594
SOIL RATING ON TILLABLE LAND	93	93	93	92	_____	93	92	94
TOTAL MONTHS LABOR	12.7	14.4	19.7	28.0	_____	15.9	15.1	14.2
MONTHS OF HIRED LABOR	1.1	2.3	6.4	10.9	_____	3.4	2.5	2.5
BEEF PRODUCED, CWT.	0	1	5	4	_____	2	1	1
PORK PRODUCED, CWT.	0	0	1	3	_____	0	0	0
DAIRY COWS, NUMBER	0	0	0	0	_____	0	0	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	95052	182287	326499	530087	_____	217570	158298	222772
LIVESTOCK RETURNS ABOVE FEED	-7	35	82	83	_____	41	93	6
CUSTOM WORK	1176	1980	2679	6720	_____	2284	1938	2182
OTHER FARM RECEIPTS	955	1729	2308	4184	_____	1877	2129	1833
VALUE OF FARM PRODUCTION	97175	186031	331567	541075	_____	221772	162458	226793
DOLLAR COSTS PER FARM:								
CROP EXPENSES	19364	36329	63488	99260	_____	42747	38421	37917
POWER AND EQUIPMENT	18609	33134	55126	84676	_____	38260	37678	31430
BUILDING AND FENCE	6598	10723	17486	28636	_____	12470	13640	10017
LABOR	14691	16422	23038	32969	_____	18382	17196	16293
LIVESTOCK SERVICES & SUPPLIES	23	109	95	183	_____	100	161	126
TAXES	6245	11110	19808	28459	_____	13073	10681	12518
INSURANCE AND MISCELLANEOUS	2421	4137	6376	9863	_____	4656	4644	4194
INTEREST ON NON-LAND CAPITAL	10217	17689	30361	48495	_____	20830	19769	17539
LAND CHARGE-NET RENT	25087	47435	82388	126783	_____	55526	45112	54112
TOTAL NON-FEED COST	103254	177086	298161	459324	_____	206041	187299	184144
CAPITAL ACCOUNT ADJUSTMENT	372	130	-868	70	_____	-21	-228	1124
MANAGEMENT RETURNS	-5707	9074	32537	81821	_____	15709	-25071	43773
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.94	1.05	1.11	1.18	_____	1.08	0.87	1.23
FARM PRODUCTION PER MAN	91743	155488	202262	232119	_____	167201	129127	191479
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	90206	169128	297230	476032	_____	200153	159092	195512
INVENTORY CHANGE	7420	18598	38148	68016	_____	23605	6186	31649
ACCTS, RECEIVABLE (NET CHANGE)	189	-1048	-1702	-1594	_____	-1032	-1918	-409
FARM PRODUCTS USED	83	325	499	504	_____	335	307	347
LESS : PURCHASED FEED	695	864	2499	1803	_____	1194	1141	115
: PURCHASED LIVESTOCK	28	107	106	79	_____	94	68	190
ADJUSTED GROSS FARM INCOME	97175	186031	331568	541075	_____	221772	162458	226793
CASH OPERATING EXPENSE	43491	77093	135005	210572	_____	91081	81294	80697
PREPAID EXPENSE(-IF INCR.)	-116	664	1826	-197	_____	717	656	1150
ACCTS. PAYABLE (+IF INCR.)	-85	-20	275	-63	_____	21	-10	29
FARM PRODUCED INPUTS	83	300	463	484	_____	311	289	340
TOTAL OPERATING EXPENSE	43371	78037	137568	210795	_____	92131	82229	82217
INCOME BEFORE DEPRECIATION	53804	107992	194000	330283	_____	129639	80230	144578
LESS DEPRECIATION	11240	20106	32638	53592	_____	23196	25671	16789
CAPITAL ACCOUNT ADJUSTMENT	372	130	-868	70	_____	-21	-228	1124
NET FARM INCOME *	42936	88016	160494	276760	_____	106422	54330	128913
(OPERATOR'S SHARE) *	( 16370)	( 29447)	( 49386)	( 83940)	( )	( 34575)	( 14782)	( 46412)
LABOR AND MGT. INCOME PER OPR.	7348	22384	44750	75780	_____	27620	-10984	56589
RATE EARNED ON INVEST. %	4.25	5.66	6.40	7.33	_____	6.00	3.14	7.84

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a high soil rating (86-100) are those with nearly level, well-drained prairie soils.

\*Interest expense deducted from operator's share only.



**Table 19a. Average Operating Costs, Investments, and Land Use of Grain Farms by Size and Management Returns, 1985 (High Soil Rating, Northern and Central Illinois)**

RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	105	487	141	47		780	122	122
<b>SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:</b>								
SOIL FERTILITY	35.78	35.79	35.99	36.05	_____	35.88	41.23	32.11
PESTICIDES	19.11	17.85	17.72	18.74	_____	18.01	19.85	16.57
SEED AND OTHER CROP	16.55	16.51	16.19	15.74	_____	16.32	17.94	15.12
CROP TOTAL	* 71.43	* 70.15	* 69.90	* 70.52	_____	* 70.21	* 79.01	* 63.80
AUTO AND UTILITIES	6.69	4.10	3.15	2.70	_____	3.81	4.66	3.69
MACHINERY REPAIRS, SUPPLIES	12.59	12.55	13.45	11.86	_____	12.70	14.15	11.13
MACHINERY HIRE	6.32	4.71	4.02	3.46	_____	4.45	6.58	4.10
FUEL AND OIL	11.07	11.18	11.17	10.86	_____	11.13	12.00	10.59
MACHINERY DEPRECIATION	31.98	31.43	28.91	31.29	_____	30.76	40.10	23.37
POWER AND EQUIPMENT TOTAL	* 68.65	* 63.98	* 60.69	* 60.16	_____	* 62.84	* 77.48	* 52.88
DRYING AND STORAGE	12.76	11.94	11.24	12.59	_____	11.89	12.73	11.16
BUILDING REPAIR	2.16	1.42	1.01	0.96	_____	1.29	2.69	0.86
BUILDING DEPRECIATION	9.42	7.35	7.00	6.79	_____	7.30	12.63	4.83
BUILDING TOTAL	* 24.34	* 20.71	* 19.25	* 20.35	_____	* 20.48	* 28.05	* 16.85
LABOR UNPAID	49.21	26.68	16.74	13.97	_____	23.58	29.86	22.70
LABOR HIRED	4.98	5.03	8.62	9.46	_____	6.61	5.50	4.72
LABOR TOTAL	* 54.20	* 31.71	* 25.36	* 23.42	_____	* 30.19	* 35.36	* 27.41
VALUE OF FEED FED	0.12	0.10	0.19	0.13	_____	0.13	0.13	0.07
CAPITAL PURCHASES	17.37	23.59	26.20	26.54	_____	24.33	25.58	19.24
OPERATOR INTEREST PAID	22.96	24.03	28.66	28.29	_____	25.81	24.15	24.88
CROP RETURNS	350.66	351.99	359.46	376.62	_____	357.35	325.53	374.82
LIVESTOCK RETURN ABOVE FEED	-0.03	0.07	0.09	0.06	_____	0.07	0.19	0.01
VALUE OF FARM PRODUCTION	358.49	359.22	365.04	384.43	_____	364.25	334.09	381.59
TOTAL NON-FEED COST	380.92	341.95	328.26	326.34	_____	338.42	385.18	309.83
MANAGEMENT RETURNS	-21.06	17.52	35.82	58.13	_____	25.80	-51.56	73.65
<b>FARM INVESTMENT:</b>								
LIVESTOCK INVENTORY	101	112	615	479	_____	224	177	68
GRAIN INVENTORY	61953	124124	217029	337009	_____	145377	118138	137690
REMAINING COST IN--								
MACHINERY AND AUTO	17339	31184	53091	98135	_____	37315	37160	26490
BUILDINGS AND FENCE	20364	25064	37819	50978	_____	28299	37268	20079
SOIL FERTILITY	68	41	85	67	_____	54	75	27
VALUE OF LAND (CURRENT)	<u>597310</u>	<u>1129392</u>	<u>1961619</u>	<u>3018643</u>	_____	<u>1322046</u>	<u>1074091</u>	<u>1288375</u>
TOTAL FARM INVESTMENT	697134	1309913	2270242	3505310	_____	1533308	1266909	1472729
TOTAL INVESTMENT PER ACRE	2467	2435	2402	2403	_____	2423	2465	2415
MACHINERY INVESTMENT PER TILLABLE ACRE	64	60	58	70	_____	61	76	45
<b>PERCENT TILLABLE LAND IN--</b>								
CORN AND CORN SILAGE	50.0	49.0	49.2	51.1	_____	49.4	50.9	48.8
SOYBEANS	43.2	44.3	43.0	39.6	_____	43.2	40.9	44.1
WHEAT	0.3	0.7	0.6	0.2	_____	0.6	1.4	0.6
OTHER SMALL GRAIN	0.1	0.2	0.1	0.0	_____	0.1	0.5	0.1
DIVERTED ACRES	4.0	4.3	4.8	4.8	_____	4.5	4.4	4.2
ALL HAY AND PASTURE	0.3	0.3	0.3	0.1	_____	0.2	0.3	0.2
<b>CROP YIELDS, BU. PER ACRE</b>								
CORN	164	166	168	172	_____	167	156	172
SOYBEANS	51	52	53	53	_____	53	49	54
WHEAT	71	71	73	77	_____	72	69	72

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a high soil rating (86-100) are those with nearly level, well-drained prairie soils.

\*Figures marked with an asterisk are subtotals.

**Table 20. Average Return, Costs, and Financial Summary of Grain Farms by Size and Management Returns, 1985 (Low Soil Rating, Northern and Central Illinois)**

GRAIN FARMS WITH SOIL RATING 56-85 NORTH & CENTRAL ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	71	284	94	48		497	71	71
TOTAL ACRES IN FARM	269	552	959	1661	_____	696	537	587
ACRES OF TILLABLE LAND	251	518	910	1567	_____	655	492	565
SOIL RATING ON TILLABLE LAND	76	78	78	76	_____	77	77	79
TOTAL MONTHS LABOR	12.2	14.2	18.7	27.2	_____	16.0	15.7	13.4
MONTHS OF HIRED LABOR	0.8	2.0	5.4	9.9	_____	3.2	2.8	1.4
BEEF PRODUCED, CWT.	1	1	3	2	_____	1	0	2
PORK PRODUCED, CWT.	0	1	0	0	_____	1	0	2
DAIRY COWS, NUMBER	0	0	0	0	_____	0	0	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	79265	166712	309485	519044	_____	215251	144109	203402
LIVESTOCK RETURNS ABOVE FEED	16	-103	-13	286	_____	-31	-515	68
CUSTOM WORK	996	2004	3721	4772	_____	2452	1920	1754
OTHER FARM RECEIPTS	1457	2380	4015	6600	_____	2965	2859	1300
VALUE OF FARM PRODUCTION	81734	170991	317206	530701	_____	220635	148372	206524
DOLLAR COSTS PER FARM:								
CROP EXPENSES	17895	35269	66714	120047	_____	46922	35524	36305
POWER AND EQUIPMENT	18855	33403	56188	89348	_____	41037	42143	29901
BUILDING AND FENCE	5657	10391	19421	27813	_____	13105	12976	9824
LABOR	13653	16213	21918	32778	_____	18526	18214	15275
LIVESTOCK SERVICES & SUPPLIES	69	177	105	62	_____	137	133	61
TAXES	4820	9438	16295	27219	_____	11792	9226	10064
INSURANCE AND MISCELLANEOUS	2285	3979	7046	9516	_____	4852	4473	3948
INTEREST ON NON-LAND CAPITAL	8797	16993	30137	50210	_____	21517	20435	16034
LAND CHARGE-NET RENT	19051	39776	69102	113536	_____	49486	37444	43804
TOTAL NON-FEED COST	91082	165635	286924	470528	_____	207371	180568	165215
CAPITAL ACCOUNT ADJUSTMENT	-17	33	-316	1862	_____	137	240	137
MANAGEMENT RETURNS	-9365	5389	29966	62036	_____	13400	-31955	41446
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.90	1.03	1.11	1.13	_____	1.06	0.82	1.25
FARM PRODUCTION PER MAN	80255	144400	203047	234044	_____	165070	113650	185006
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	75739	155070	274105	454523	_____	195172	146495	168794
INVENTORY CHANGE	6546	16674	44675	74072	_____	26066	3169	36659
ACCTS. RECEIVABLE (NET CHANGE)	-532	-196	-538	2958	_____	-4	-545	1264
FARM PRODUCTS USED	100	261	352	425	_____	271	247	325
LESS : PURCHASED FEED	43	732	1343	1159	_____	790	987	518
: PURCHASED LIVESTOCK	74	85	43	117	_____	79	6	0
ADJUSTED GROSS FARM INCOME	81734	170991	317206	530702	_____	220635	148372	206524
CASH OPERATING EXPENSE	38909	72812	135528	228914	_____	94907	76989	72981
PREPAID EXPENSE (-IF INCR.)	126	584	1008	1383	_____	676	257	1636
ACCTS. PAYABLE (+IF INCR.)	58	90	118	-289	_____	54	226	-280
FARM PRODUCED INPUTS	76	245	340	383	_____	252	232	292
TOTAL OPERATING EXPENSE	39169	73731	136994	230391	_____	95889	77705	74627
INCOME BEFORE DEPRECIATION	42565	97260	180216	300314	_____	124747	70666	131897
LESS DEPRECIATION	10961	21052	35322	56531	_____	25736	30163	16972
CAPITAL ACCOUNT ADJUSTMENT	-17	33	-316	1862	_____	137	240	137
NET FARM INCOME *	31587	76243	144578	245645	_____	99149	40744	115062
(OPERATOR'S SHARE) *	( 13162)	( 23782)	( 40112)	( 64772)	( _____)	( 29312)	( 4530)	( 42144)
LABOR AND MGT. INCOME PER OPR.	3673	19176	41523	60551	_____	25184	-16674	54784
RATE EARNED ON INVEST. %	3.43	5.59	6.70	7.16	_____	6.11	2.38	8.43

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a low soil rating (56-85) are those with poorly drained, heavy-till, and timber soils.

\* Interest expense deducted from operator's share only.

**Table 20a. Average Operating Costs, Investments, and Land Use of Grain Farms by Size and Management Returns, 1985 (Low Soil Rating, Northern and Central Illinois)**

RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	71	284	94	48		497	71	71
SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	36.01	34.32	36.89	42.03	_____	36.87	35.92	31.87
PESTICIDES	18.55	17.75	19.24	16.88	_____	17.99	20.66	16.64
SEED AND OTHER CROP	16.80	16.07	17.21	17.71	_____	16.79	15.60	15.73
CROP TOTAL	* 71.37	* 68.14	* 73.34	* 76.62	_____	* 71.64	* 72.18	* 64.24
AUTO AND UTILITIES	6.63	4.71	3.45	3.07	_____	4.10	5.91	4.10
MACHINERY REPAIRS, SUPPLIES	15.21	12.22	11.91	11.39	_____	12.11	14.62	11.32
MACHINERY HIRE	8.02	4.29	5.16	4.33	_____	4.73	5.95	2.85
FUEL AND OIL	11.94	11.09	10.65	10.53	_____	10.89	12.44	10.02
MACHINERY DEPRECIATION	33.38	32.24	30.60	27.71	_____	30.82	46.70	24.61
POWER AND EQUIPMENT TOTAL	* 75.20	* 64.54	* 61.77	* 57.03	_____	* 62.66	* 85.63	* 52.91
DRYING AND STORAGE	10.47	10.06	11.82	8.42	_____	10.16	8.62	10.92
BUILDING REPAIR	1.80	1.63	1.36	1.37	_____	1.50	3.16	1.16
BUILDING DEPRECIATION	10.29	8.39	8.18	7.96	_____	8.34	14.59	5.30
BUILDING TOTAL	* 22.56	* 20.08	* 21.35	* 17.75	_____	* 20.01	* 26.37	* 17.38
LABOR UNPAID	52.26	27.22	16.90	12.68	_____	22.52	30.11	24.38
LABOR HIRED	2.19	4.11	7.20	8.24	_____	5.77	6.89	2.65
LABOR TOTAL	* 54.45	* 31.33	* 24.10	* 20.92	_____	* 28.29	* 37.01	* 27.03
VALUE OF FEED FED	0.12	0.13	0.12	0.08	_____	0.12	0.10	0.18
CAPITAL PURCHASES	27.63	25.11	25.11	20.51	_____	24.19	29.81	28.60
OPERATOR INTEREST PAID	19.80	26.60	30.21	31.66	_____	28.34	27.64	26.90
CROP RETURNS	316.11	322.11	340.24	331.29	_____	328.66	292.80	359.91
LIVESTOCK RETURN ABOVE FEED	0.06	-0.20	-0.02	0.18	_____	-0.05	-1.05	0.12
VALUE OF FARM PRODUCTION	325.96	330.37	348.73	338.73	_____	336.88	301.46	365.43
TOTAL NON-FEED COST	363.24	320.03	315.43	300.32	_____	316.63	366.88	292.33
MANAGEMENT RETURNS	-37.35	10.41	32.94	39.60	_____	20.46	-64.93	73.34
FARM INVESTMENT:								
LIVESTOCK INVENTORY	53	288	392	144	_____	260	373	377
GRAIN INVENTORY	52324	102560	177059	274773	_____	126106	107890	109921
REMAINING COST IN--								
MACHINERY AND AUTO	15796	34564	61662	97974	_____	43132	46857	30752
BUILDINGS AND FENCE	16460	27062	43344	72934	_____	33057	40929	17885
SOIL FERTILITY	16	73	223	5349	_____	603	0	257
VALUE OF LAND (CURRENT)	453605	947050	1645300	2703248	_____	1178233	891529	1042949
TOTAL FARM INVESTMENT	538253	1111581	1927978	3154421	_____	1381382	1087577	1202140
TOTAL INVESTMENT PER ACRE	2004	2013	2010	1899	_____	1986	2027	2050
MACHINERY INVESTMENT PER TILLABLE ACRE	63	67	68	63	_____	66	95	54
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	53.4	51.3	54.0	58.5	_____	53.8	54.5	49.5
SOYBEANS	36.4	40.2	38.3	32.1	_____	37.6	34.2	43.5
WHEAT	1.5	1.6	1.3	2.0	_____	1.6	1.7	1.7
OTHER SMALL GRAIN	0.4	0.1	0.1	0.1	_____	0.1	0.0	0.1
DIVERTED ACRES	4.9	5.0	5.1	5.6	_____	5.2	5.5	4.9
ALL HAY AND PASTURE	0.4	0.6	0.4	0.5	_____	0.5	1.3	0.2
CROP YIELDS, BU. PER ACRE								
CORN	145	150	155	148	_____	151	136	165
SOYBEANS	48	49	50	47	_____	49	43	53
WHEAT	67	66	58	67	_____	65	61	71

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a low soil rating (56-85) are those with poorly drained, heavy-till, and timber soils.

\*Figures marked with an asterisk are subtotals.



**Table 21. Average Return, Costs, and Financial Summary of Hog Farms by Size and Months of Labor, 1985 (High Soil Rating, Northern and Central Illinois)**

HOG FARMS WITH SOIL RATING 86-100 NORTH & CENTRAL ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	22	54	33	15		124	29	11
TOTAL ACRES IN FARM	207	372	615	1190	_____	506	476	770
ACRES OF TILLABLE LAND	190	348	576	1101	_____	472	442	709
SOIL RATING ON TILLABLE LAND	94	92	92	90	_____	92	93	92
TOTAL MONTHS LABOR	14.6	20.3	29.7	42.1	_____	24.5	24.5	35.3
MONTHS OF HIRED LABOR	2.1	5.8	12.1	22.7	_____	8.9	6.5	11.5
BEEF PRODUCED, CWT.	59	91	142	187	_____	111	150	137
PORK PRODUCED, CWT.	2206	3456	5710	7404	_____	4311	4619	5365
DAIRY COWS, NUMBER	0	0	0	0	_____	0	0	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	69663	119317	199071	364555	_____	161398	152585	227249
LIVESTOCK RETURNS ABOVE FEED	27078	55932	94506	109056	_____	67505	81888	86097
CUSTOM WORK	254	1789	1837	2163	_____	1575	1440	2220
OTHER FARM RECEIPTS	1941	1828	2943	20774	_____	4436	3363	3829
VALUE OF FARM PRODUCTION	98936	178866	298358	496547	_____	234914	239276	319396
DOLLAR COSTS PER FARM:								
CROP EXPENSES	14194	25305	45078	69423	_____	33933	32411	45798
POWER AND EQUIPMENT	24197	38224	60146	93709	_____	48281	48578	62498
BUILDING AND FENCE	12092	15403	32617	46547	_____	23164	23689	30430
LABOR	17053	23531	36817	54496	_____	29663	30529	40743
LIVESTOCK SERVICES & SUPPLIES	3807	7116	11101	15321	_____	8582	7925	15523
TAXES	4441	7853	12651	22666	_____	10317	9775	14783
INSURANCE AND MISCELLANEOUS	2977	4114	7234	13655	_____	5897	5154	7877
INTEREST ON NON-LAND CAPITAL	15753	26265	45757	71600	_____	35071	35405	47111
LAND CHARGE-NET RENT	18013	32130	52169	100246	_____	43198	41747	63351
TOTAL NON-FEED COST	112528	179940	303571	487663	_____	238106	235213	328114
CAPITAL ACCOUNT ADJUSTMENT	-547	155	-866	652	_____	-180	-823	492
MANAGEMENT RETURNS	-14139	-918	-6079	9536	_____	-3372	3240	-8225
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.88	0.99	0.98	1.02	_____	0.99	1.02	0.97
FARM PRODUCTION PER MAN	81065	105695	120365	141422	_____	115273	117246	108604
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	139745	222189	402810	627701	_____	304684	299786	395698
INVENTORY CHANGE	7876	15496	7347	-908	_____	9991	17138	16214
ACCTS. RECEIVABLE (NET CHANGE)	941	1289	-1051	10813	_____	1757	1112	-1990
FARM PRODUCTS USED	360	375	571	638	_____	456	469	622
LESS : PURCHASED FEED	36345	48511	86090	120782	_____	65096	63585	73528
: PURCHASED LIVESTOCK	13640	11972	25228	20915	_____	16878	15643	17620
ADJUSTED GROSS FARM INCOME	98936	178866	298358	496547	_____	234914	239276	319396
CASH OPERATING EXPENSE	45403	77597	136167	220869	_____	104804	100093	145054
PREPAID EXPENSE (-IF INCR.)	-309	1062	1368	731	_____	860	1457	-574
ACCTS. PAYABLE (+IF INCR.)	-191	-53	130	577	_____	47	235	0
FARM PRODUCED INPUTS	181	92	230	253	_____	164	220	248
TOTAL OPERATING EXPENSE	45082	78696	137895	222430	_____	105874	102003	144727
INCOME BEFORE DEPRECIATION	53854	100171	160463	274117	_____	129041	137273	174669
LESS DEPRECIATION	19200	26185	47485	71001	_____	36036	35377	45535
CAPITAL ACCOUNT ADJUSTMENT	-547	155	-866	652	_____	-180	-823	492
NET FARM INCOME *	34106	74141	112111	203768	_____	92823	101072	129626
(OPERATOR'S SHARE) *	( 11635)	( 26252)	( 30565)	( 34741)	( )	( 25833)	( 37229)	( 33664)
LABOR AND MGT. INCOME PER OPR.	-72	13179	4947	20411	_____	9512	16911	9505
RATE EARNED ON INVEST. %	3.48	5.76	5.62	6.05	_____	5.62	6.17	5.31

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a high soil rating (86-100) are those with nearly level, well-drained prairie soils.

\*Interest expense deducted from operator's share only.

**Table 21a. Average Operating Costs, Investments, and Land Use of Hog Farms by Size and Months of Labor, 1985 (High Soil Rating, Northern and Central Illinois)**

RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	22	54	33	15		124	29	11
SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	34.17	36.34	38.18	29.29	_____	34.79	34.82	32.94
PESTICIDES	21.65	18.82	21.34	19.96	_____	20.16	20.84	15.97
SEED AND OTHER CROP	18.76	17.62	18.78	13.80	_____	17.00	17.74	15.72
CROP TOTAL	* 74.58	* 72.78	* 78.30	* 63.05	_____	* 71.95	* 73.41	* 64.62
AUTO AND UTILITIES	16.37	14.11	15.33	11.49	_____	13.93	15.24	12.52
MACHINERY REPAIRS, SUPPLIES	23.40	22.65	22.19	19.25	_____	21.59	23.95	20.59
MACHINERY HIRE	13.05	7.68	7.34	3.49	_____	6.77	7.83	3.70
FUEL AND OIL	20.12	19.00	16.49	15.43	_____	17.26	19.04	16.03
MACHINERY DEPRECIATION	54.20	46.50	43.13	35.45	_____	42.84	43.96	35.35
POWER AND EQUIPMENT TOTAL	* 127.14	* 109.94	* 104.47	* 85.10	_____	* 102.38	* 110.02	* 88.18
DRYING AND STORAGE	8.84	9.07	10.64	8.11	_____	9.29	11.95	10.89
BUILDING REPAIR	8.01	6.43	6.68	5.45	_____	6.35	5.56	3.15
BUILDING DEPRECIATION	46.68	28.80	39.34	28.71	_____	33.48	36.15	28.90
BUILDING TOTAL	* 63.54	* 44.30	* 56.66	* 42.27	_____	* 49.12	* 53.65	* 42.94
LABOR UNPAID	76.08	47.93	35.20	20.33	_____	38.01	46.84	38.65
LABOR HIRED	13.52	19.75	28.75	29.16	_____	24.89	22.31	18.84
LABOR TOTAL	* 89.60	* 67.68	* 63.95	* 49.49	_____	* 62.90	* 69.14	* 57.49
VALUE OF FEED FED	331.24	260.56	256.75	181.67	_____	242.10	269.42	195.45
CAPITAL PURCHASES	69.30	26.74	39.44	25.61	_____	33.60	42.13	20.60
OPERATOR INTEREST PAID	74.92	47.03	53.75	64.04	_____	56.02	55.65	67.97
CROP RETURNS	366.04	343.18	345.79	331.07	_____	342.24	345.59	320.64
LIVESTOCK RETURN ABOVE FEED	142.28	160.87	164.16	99.04	_____	143.14	185.47	121.48
VALUE OF FARM PRODUCTION	519.84	514.45	518.26	450.94	_____	498.13	541.94	450.66
TOTAL NON-FEED COST	591.26	517.54	527.31	442.87	_____	504.90	532.74	462.96
MANAGEMENT RETURNS	-74.30	-2.64	-10.56	8.66	_____	-7.15	7.34	-11.61
FARM INVESTMENT:								
LIVESTOCK INVENTORY	40321	68315	115915	162644	_____	87427	97166	108650
GRAIN INVENTORY	35316	74511	118870	199168	_____	94442	95146	141905
REMAINING COST IN--								
MACHINERY AND AUTO	22340	33660	50864	96363	_____	43815	38247	55583
BUILDINGS AND FENCE	37620	56411	107476	151549	_____	78176	78851	110616
SOIL FERTILITY	0	13	4	589	_____	78	4	0
VALUE OF LAND (CURRENT)	<u>428891</u>	<u>765001</u>	<u>1242114</u>	<u>2386805</u>	_____	<u>1028528</u>	<u>993977</u>	<u>1508352</u>
TOTAL FARM INVESTMENT	564488	997908	1635244	2997116	_____	1332464	1303389	1925105
TOTAL INVESTMENT PER ACRE	2731	2681	2660	2518	_____	2632	2737	2499
MACHINERY INVESTMENT PER TILLABLE ACRE	117	97	88	88	_____	93	87	78
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	58.4	61.0	59.8	53.5	_____	58.3	61.6	48.9
SOYBEANS	30.4	28.6	30.2	34.0	_____	30.8	28.5	38.7
WHEAT	1.9	1.5	1.8	1.3	_____	1.6	1.5	0.9
OTHER SMALL GRAIN	1.3	1.8	0.7	0.2	_____	0.9	1.4	0.3
DIVERTED ACRES	4.2	3.8	4.0	4.7	_____	4.2	5.0	4.2
ALL HAY AND PASTURE	3.7	2.7	1.1	1.0	_____	1.8	2.0	1.3
CROP YIELDS, BU. PER ACRE								
CORN	155	158	160	157	_____	158	154	147
SOYBEANS	55	52	54	52	_____	53	52	51
WHEAT	79	71	78	73	_____	75	75	62

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a high soil rating (86-100) are those with nearly level, well-drained prairie soils.

\*Figures marked with an asterisk are subtotals.

**Table 22. Average Return, Costs, and Financial Summary of Hog Farms by Size and Months of Labor, 1985 (Low Soil Rating, Northern and Central Illinois)**

HOG FARMS WITH SOIL RATING 56-85 NORTH & CENTRAL ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	43	97	67	42		249	54	30
TOTAL ACRES IN FARM	186	384	638	1082	_____	536	583	759
ACRES OF TILLABLE LAND	168	331	521	887	_____	448	494	601
SOIL RATING ON TILLABLE LAND	74	76	73	75	_____	74	76	74
TOTAL MONTHS LABOR	15.2	18.7	24.6	36.7	_____	22.7	24.5	35.2
MONTHS OF HIRED LABOR	2.4	4.2	8.0	17.6	_____	7.2	8.3	13.5
BEEF PRODUCED, CWT.	50	176	289	569	_____	251	184	615
PORK PRODUCED, CWT.	2423	3065	3969	6380	_____	3757	4032	5681
DAIRY COWS, NUMBER	0	1	1	0	_____	1	3	1
DOLLAR RETURNS PER FARM:								
CROP RETURNS	52194	100834	153179	280660	_____	136851	152425	182673
LIVESTOCK RETURNS ABOVE FEED	38006	51326	62687	104243	_____	61008	64649	99276
CUSTOM WORK	598	928	2337	4439	_____	1842	1577	3493
OTHER FARM RECEIPTS	932	2447	4920	6273	_____	3496	4559	4959
VALUE OF FARM PRODUCTION	91730	155536	223123	395616	_____	203199	223210	290402
DOLLAR COSTS PER FARM:								
CROP EXPENSES	11847	26371	36290	61312	_____	32425	36314	41148
POWER AND EQUIPMENT	23044	37370	52405	79988	_____	46130	51938	68462
BUILDING AND FENCE	11544	17142	22355	36161	_____	20786	24752	30057
LABOR	16821	22170	27531	43713	_____	26323	28817	39554
LIVESTOCK SERVICES & SUPPLIES	3970	5634	7955	12342	_____	7103	7837	12253
TAXES	3474	6141	9593	15815	_____	8241	9158	11648
INSURANCE AND MISCELLANEOUS	2544	3753	6380	10319	_____	5358	5790	9349
INTEREST ON NON-LAND CAPITAL	15786	26544	37072	60401	_____	33230	38178	50085
LAND CHARGE-NET RENT	12348	24991	37620	67018	_____	33295	37520	44544
TOTAL NON-FEED COST	101378	170117	237201	387071	_____	212892	240304	307098
CAPITAL ACCOUNT ADJUSTMENT	-69	-587	-417	-792	_____	-487	-779	-469
MANAGEMENT RETURNS	-9718	-15168	-14496	7752	_____	-10180	-17872	-17166
FARM PRODUCTION PER \$1.00 OF NON-FEED COSTS	0.90	0.91	0.94	1.02	_____	0.95	0.93	0.95
FARM PRODUCTION PER MAN	72474	99595	108914	129315	_____	107274	109130	98907
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	137690	205793	297721	525028	_____	272615	301836	413225
INVENTORY CHANGE	2873	5706	7107	19964	_____	7999	7274	12182
ACCTS. RECEIVABLE (NET CHANGE)	561	1034	1695	2054	_____	1302	1686	1225
FARM PRODUCTS USED	330	486	599	827	_____	547	569	818
LESS : PURCHASED FEED	38976	44189	64313	93796	_____	57071	61547	92727
: PURCHASED LIVESTOCK	10747	13258	19687	58464	_____	22179	26541	44321
ADJUSTED GROSS FARM INCOME	91730	155573	223124	395616	_____	203213	223277	290402
CASH OPERATING EXPENSE	39509	73431	106393	181791	_____	94720	104897	140429
PREPAID EXPENSE(-IF INCR.)	395	-16	367	-744	_____	34	841	-852
ACCTS. PAYABLE (+IF INCR.)	0	166	26	142	_____	96	67	167
FARM PRODUCED INPUTS	40	85	168	73	_____	98	173	65
TOTAL OPERATING EXPENSE	39943	73665	106955	181261	_____	94948	105977	139808
INCOME BEFORE DEPRECIATION	51787	81908	116168	214355	_____	108265	117300	150594
LESS DEPRECIATION	18578	28184	36536	56441	_____	33539	40048	47708
CAPITAL ACCOUNT ADJUSTMENT	-69	-587	-417	-792	_____	-487	-779	-469
NET FARM INCOME *	33138	53136	79214	157120	_____	74239	76472	102416
(OPERATOR'S SHARE) *	( 13949)	( 17896)	( 21148)	( 49642)	( )	( 23444)	( 23515)	( 37150)
LABOR AND MGT. INCOME PER OPR.	5146	-638	829	16298	_____	3612	-2117	1987
RATE EARNED ON INVEST. %	4.27	4.39	4.93	6.39	_____	5.21	4.72	5.19

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a low soil rating (56-85) are those with poorly drained, heavy-till, and timber soils.

\*Interest expense deducted from operator's share only.



**Table 22a. Average Operating Costs, Investments, and Land Use of Hog Farms by Size and Months of Labor, 1985 (Low Soil Rating, Northern and Central Illinois)**

RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	43	97	67	42		249	54	30
<b>SELECTED COST AND RETURN</b>								
<b>ITEMS PER TILLABLE ACRE:</b>								
SOIL FERTILITY	35.77	41.88	34.44	32.50	_____	36.02	36.56	30.87
PESTICIDES	16.78	19.94	18.42	18.95	_____	18.93	19.41	19.51
SEED AND OTHER CROP	17.90	17.76	16.76	17.66	_____	17.42	17.48	18.12
CROP TOTAL	* 70.45	* 79.58	* 69.63	* 69.11	_____	* 72.38	* 73.45	* 68.50
AUTO AND UTILITIES	19.85	14.01	12.42	11.26	_____	12.97	13.16	16.26
MACHINERY REPAIRS, SUPPLIES	28.92	24.06	21.73	19.36	_____	22.08	21.37	27.31
MACHINERY HIRE	8.84	7.74	6.08	5.27	_____	6.47	7.50	4.82
FUEL AND OIL	20.80	18.38	18.15	16.62	_____	17.88	17.10	21.63
MACHINERY DEPRECIATION	58.63	48.59	42.16	37.64	_____	43.57	45.92	43.94
POWER AND EQUIPMENT TOTAL	* 137.04	* 112.78	* 100.54	* 90.16	_____	* 102.97	* 105.05	* 113.96
DRYING AND STORAGE	8.84	8.89	7.52	9.10	_____	8.53	7.90	7.05
BUILDING REPAIR	8.13	6.50	7.49	5.68	_____	6.64	7.09	7.64
BUILDING DEPRECIATION	51.67	36.34	27.88	25.98	_____	31.22	35.08	35.34
BUILDING TOTAL	* 68.65	* 51.73	* 42.89	* 40.76	_____	* 46.40	* 50.06	* 50.03
LABOR UNPAID	87.55	50.61	36.49	24.74	_____	39.94	37.71	41.54
LABOR HIRED	12.48	16.30	16.33	24.53	_____	18.81	20.57	24.30
LABOR TOTAL	* 100.03	* 66.91	* 52.82	* 49.27	_____	* 58.75	* 58.28	* 65.84
VALUE OF FEED FED	385.48	258.66	224.70	208.15	_____	239.38	236.00	278.92
CAPITAL PURCHASES	42.26	55.23	39.25	33.56	_____	42.15	49.63	40.80
OPERATOR INTEREST PAID	56.96	48.71	56.44	46.68	_____	50.98	50.03	65.36
CROP RETURNS	310.38	304.31	293.89	316.34	_____	305.46	308.29	304.08
LIVESTOCK RETURN ABOVE FEED	226.01	154.90	120.27	117.49	_____	136.17	130.76	165.26
VALUE OF FARM PRODUCTION	545.48	469.40	428.09	445.91	_____	453.55	451.45	483.41
TOTAL NON-FEED COST	602.86	513.40	455.10	436.28	_____	475.19	486.03	511.21
MANAGEMENT RETURNS	-57.80	-45.78	-27.81	8.74	_____	-22.72	-36.15	-28.58
<b>FARM INVESTMENT:</b>								
LIVESTOCK INVENTORY	44156	70315	99194	168086	_____	90060	97038	157534
GRAIN INVENTORY	31562	63407	92931	165920	_____	83143	91546	111099
REMAINING COST IN--								
MACHINERY AND AUTO	20250	36134	47712	70358	_____	42279	50509	53628
BUILDINGS AND FENCE	40895	62558	84057	115953	_____	73608	92731	108319
SOIL FERTILITY	42	188	181	2	_____	130	0	55
VALUE OF LAND (CURRENT)	<u>294005</u>	<u>595024</u>	<u>895716</u>	<u>1595679</u>	_____	<u>792735</u>	<u>893329</u>	<u>1060562</u>
TOTAL FARM INVESTMENT	430909	827625	1219790	2115998	_____	1081953	1225152	1491196
TOTAL INVESTMENT PER ACRE	2323	2158	1911	1955	_____	2020	2100	1966
MACHINERY INVESTMENT PER TILLABLE ACRE	120	109	92	79	_____	94	102	89
<b>PERCENT TILLABLE LAND IN--</b>								
CORN AND CORN SILAGE	66.3	64.0	59.4	57.0	_____	60.4	58.1	62.5
SOYBEANS	16.1	20.6	24.1	29.1	_____	24.2	26.2	23.5
WHEAT	2.8	1.8	2.7	3.0	_____	2.5	2.6	2.5
OTHER SMALL GRAIN	3.7	1.8	1.5	0.7	_____	1.4	1.2	1.0
DIVERTED ACRES	4.1	4.2	5.2	4.9	_____	4.7	3.3	4.9
ALL HAY AND PASTURE	5.5	6.3	5.9	3.4	_____	5.2	5.4	5.2
<b>CROP YIELDS, BU. PER ACRE</b>								
CORN	140	140	137	144	_____	140	145	137
SOYBEANS	49	46	48	48	_____	48	48	45
WHEAT	58	68	66	69	_____	67	71	60

Note: Variations in totals are due to rounding to the nearest dollar. Farms having a low soil rating (56-85) are those with poorly drained, heavy-till, and timber soils.

\*Figures marked with an asterisk are subtotals.

**Table 23. Average Return, Costs, and Financial Summary of Grain Farms by Size and Management Returns, Southern Illinois, 1985**

GRAIN FARMS WITH SOIL RATING 36-85 SOUTHERN ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	40	295	174	106		615	74	74
TOTAL ACRES IN FARM	277	570	974	1829		882	585	595
ACRES OF TILLABLE LAND	255	520	893	1680		809	533	558
SOIL RATING ON TILLABLE LAND	59	60	60	58		59	58	62
TOTAL MONTHS LABOR	12.3	15.0	20.0	32.6		19.3	15.7	14.3
MONTHS OF HIRED LABOR	1.0	2.2	5.4	14.3		5.1	2.5	2.1
BEEF PRODUCED, CWT.	59	67	105	178		96	88	33
PORK PRODUCED, CWT.	99	211	345	474		287	124	336
DAIRY COWS, NUMBER	1	0	0	0		0	0	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	55486	119480	204907	382610		184840	103336	149446
LIVESTOCK RETURNS ABOVE FEED	2481	3482	7014	8842		5340	1361	5810
CUSTOM WORK	770	1136	1960	5051		2020	1073	1269
OTHER FARM RECEIPTS	1087	1433	2629	5187		2396	1435	1505
VALUE OF FARM PRODUCTION	59823	125531	216510	401690		194596	107205	158030
DOLLAR COSTS PER FARM:								
CROP EXPENSES	15759	30352	52202	103698		48227	33481	31533
POWER AND EQUIPMENT	19167	33651	55957	105356		51378	43015	30293
BUILDING AND FENCE	2382	6326	10961	20297		9789	7415	6595
LABOR	13775	16920	22833	40408		22436	18039	16010
LIVESTOCK SERVICES & SUPPLIES	434	455	1067	1198		755	353	579
TAXES	2556	5267	8988	15554		7917	5154	5792
INSURANCE AND MISCELLANEOUS	1691	3288	4857	8431		4514	3238	3308
INTEREST ON NON-LAND CAPITAL	6441	12977	22482	43346		20476	15823	12135
LAND CHARGE-NET RENT	12628	26228	44420	79355		39647	26067	29168
TOTAL NON-FEED COST	74832	135460	223763	417639		205136	152587	135412
CAPITAL ACCOUNT ADJUSTMENT	30	209	439	-470		145	-451	896
MANAGEMENT RETURNS	-14979	-9719	-6813	-16421		-10394	-45833	23514
FARM PRODUCTION PER \$1.00 OF NON-FEED COSTS	0.80	0.93	0.97	0.96		0.95	0.70	1.17
FARM PRODUCTION PER MAN	58352	100685	130101	147639		121281	82124	132501
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	62963	126917	223017	410482		198821	126302	147629
INVENTORY CHANGE	-556	6183	7660	18553		8294	-9420	17048
ACCTS. RECEIVABLE (NET CHANGE)	419	426	708	1270		651	-175	1277
FARM PRODUCTS USED	416	750	1191	1802		1034	732	793
LESS : PURCHASED FEED	2023	5671	11298	24652		10297	5057	6504
: PURCHASED LIVESTOCK	1394	3074	4768	5765		3908	5175	2212
ADJUSTED GROSS FARM INCOME	59823	125531	216511	401690		194596	107205	158031
CASH OPERATING EXPENSE	32751	61374	107065	214993		98917	67303	62890
PREPAID EXPENSE(-IF INCR.)	-221	-34	-911	-908		-445	350	71
ACCTS. PAYABLE (+IF INCR.)	-52	98	-91	-489		-66	245	-127
FARM PRODUCED INPUTS	238	584	1000	1527		842	528	640
TOTAL OPERATING EXPENSE	32715	62021	107062	215121		99246	68425	63472
INCOME BEFORE DEPRECIATION	27108	63513	109451	186569		95352	38779	94559
LESS DEPRECIATION	9996	19537	33055	58663		29485	27081	16566
CAPITAL ACCOUNT ADJUSTMENT	30	209	439	-470		145	-451	896
NET FARM INCOME *	17141	44186	76836	127436		66013	11247	78888
(OPERATOR'S SHARE) *	( 4777)	( 10282)	( 9207)	( 12358)		( 9978)	( -10595)	( 28361)
LABOR AND MGT. INCOME PER OPR.	-2559	3827	6765	-1705		3289	-31447	36697
RATE EARNED ON INVEST. %	1.15	3.99	4.81	4.71		4.44	-0.52	8.09

Note: Variations in totals are due to rounding to the nearest dollar.

\* Interest expense deducted from operator's share only.

**Table 23a. Average Operating Costs, Investments, and Land Use of Grain Farms by Size and Management Returns, Southern Illinois, 1985**

RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	800-1199	OVER 1199	YOUR FARM	ALL FARMS	340-799	
MANAGEMENT RETURNS							LOW 25%	HIGH 25%
NUMBER OF FARMS	40	295	174	106		615	74	74
SELECTED COST AND RETURN								
ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	28.88	29.81	29.05	32.21	_____	30.41	34.28	28.08
PESTICIDES	17.84	14.55	15.53	15.71	_____	15.34	14.54	14.17
SEED AND OTHER CROP	14.99	13.96	13.84	13.80	_____	13.89	13.97	14.31
CROP TOTAL	* 61.72	* 58.32	* 58.43	* 61.72	_____	* 59.64	* 62.79	* 56.55
AUTO AND UTILITIES	6.69	4.61	3.46	3.55	_____	3.91	5.09	4.37
MACHINERY REPAIRS, SUPPLIES	15.19	13.03	12.91	14.06	_____	13.41	15.99	11.19
MACHINERY HIRE	3.89	3.89	3.79	5.39	_____	4.39	4.29	3.91
FUEL AND OIL	14.48	12.14	12.25	11.59	_____	12.03	13.07	11.21
MACHINERY DEPRECIATION	34.82	30.99	30.22	28.12	_____	29.80	42.22	23.64
POWER AND EQUIPMENT TOTAL	* 75.06	* 64.66	* 62.63	* 62.71	_____	* 63.54	* 80.67	* 54.33
DRYING AND STORAGE	3.39	4.22	4.22	4.23	_____	4.21	3.30	4.86
BUILDING REPAIR	1.61	1.51	1.31	1.38	_____	1.40	2.26	1.02
BUILDING DEPRECIATION	4.33	6.43	6.74	6.47	_____	6.50	8.35	5.95
BUILDING TOTAL	* 9.33	* 12.16	* 12.27	* 12.08	_____	* 12.11	* 13.91	* 11.83
LABOR UNPAID	51.12	28.25	18.74	12.59	_____	20.14	28.49	25.24
LABOR HIRED	2.83	4.26	6.81	11.46	_____	7.61	5.34	3.48
LABOR TOTAL	* 53.95	* 32.51	* 25.56	* 24.05	_____	* 27.75	* 33.83	* 28.71
VALUE OF FEED FED	22.00	16.07	15.48	11.34	_____	14.31	15.37	16.58
CAPITAL PURCHASES	25.45	19.17	20.02	20.70	_____	20.11	28.74	12.52
OPERATOR INTEREST PAID	16.21	25.06	30.41	29.17	_____	28.02	18.84	32.91
CROP RETURNS	217.29	229.58	229.34	227.73	_____	228.59	193.79	268.03
LIVESTOCK RETURN ABOVE FEED	9.71	6.69	7.85	5.26	_____	6.60	2.55	10.42
VALUE OF FARM PRODUCTION	234.28	241.20	242.33	239.09	_____	240.66	201.05	283.42
TOTAL NON-FEED COST	293.06	260.28	250.45	248.58	_____	253.69	286.16	242.86
MANAGEMENT RETURNS	-58.66	-18.68	-7.63	-9.77	_____	-12.86	-85.96	42.17
FARM INVESTMENT:								
LIVESTOCK INVENTORY	9164	10453	16763	23411	_____	14388	13288	8677
GRAIN INVENTORY	25246	58172	95352	189387	_____	89166	60321	60582
REMAINING COST IN--								
MACHINERY AND AUTO	14922	30722	54808	104203	_____	49174	45905	23593
BUILDINGS AND FENCE	4307	14598	25555	50220	_____	23168	18624	13682
SOIL FERTILITY	0	99	123	937	_____	244	120	134
VALUE OF LAND (CURRENT)	<u>300663</u>	<u>624488</u>	<u>1057611</u>	<u>1889419</u>	_____	<u>943989</u>	<u>620642</u>	<u>694468</u>
TOTAL FARM INVESTMENT	354302	738531	1250212	2257578	_____	1120127	758899	801137
TOTAL INVESTMENT PER ACRE	1281	1295	1283	1235	_____	1269	1296	1346
MACHINERY INVESTMENT								
PER TILLABLE ACRE	58	59	61	62	_____	61	86	42
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	37.4	37.2	37.0	38.9	_____	37.7	34.7	40.6
SOYBEANS	40.1	43.8	44.1	40.6	_____	42.7	41.8	43.9
WHEAT	7.7	5.0	5.3	5.0	_____	5.2	4.7	4.2
OTHER SMALL GRAIN	0.4	0.2	0.1	0.3	_____	0.2	0.2	0.1
DIVERTED ACRES	4.0	5.8	5.5	6.0	_____	5.8	6.1	5.2
ALL HAY AND PASTURE	6.2	2.7	2.1	1.4	_____	2.1	4.2	1.7
CROP YIELDS, BU. PER ACRE								
CORN	111	116	116	112	_____	114	104	127
SOYBEANS	38	39	38	37	_____	38	34	44
WHEAT	36	41	43	43	_____	42	38	44

Note: Variations in totals are due to rounding to the nearest dollar.

\*Figures marked with an asterisk are subtotals.



Table 24. Average Return, Costs, and Financial Summary of Hog Farms by Size and Months of Labor, Southern Illinois, 1985

HOG FARMS WITH SOIL RATING 36-85 SOUTHERN ILLINOIS								
RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	30	65	66	47		208	51	13
TOTAL ACRES IN FARM	194	371	615	1176	_____	605	700	810
ACRES OF TILLABLE LAND	165	327	539	1060	_____	536	617	763
SOIL RATING ON TILLABLE LAND	60	60	59	60	_____	60	59	65
TOTAL MONTHS LABOR	15.7	17.6	23.1	33.3	_____	22.6	24.3	34.1
MONTHS OF HIRED LABOR	3.7	3.8	7.7	15.0	_____	7.5	7.5	18.9
BEEF PRODUCED, CWT.	40	110	145	281	_____	149	201	97
PORK PRODUCED, CWT.	2165	2638	3759	5618	_____	3599	3751	5648
DAIRY COWS, NUMBER	0	0	0	3	_____	1	1	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	38242	75212	126669	229981	_____	121179	146711	174898
LIVESTOCK RETURNS ABOVE FEED	42173	41533	62100	98721	_____	61074	64304	98974
CUSTOM WORK	599	672	1424	1009	_____	976	1461	578
OTHER FARM RECEIPTS	425	1230	2159	3031	_____	1816	2038	4045
VALUE OF FARM PRODUCTION	81438	118647	192352	332744	_____	185045	214516	278495
DOLLAR COSTS PER FARM:								
CROP EXPENSES	10601	21403	33207	63023	_____	32995	40379	46869
POWER AND EQUIPMENT	20229	33220	52630	82181	_____	48569	54434	81395
BUILDING AND FENCE	9342	11770	17897	26178	_____	16620	15271	26846
LABOR	17495	20029	26930	40140	_____	26397	28715	40302
LIVESTOCK SERVICES & SUPPLIES	3232	3550	5867	11376	_____	6007	6090	11445
TAXES	2135	3974	5831	9832	_____	5622	5983	10102
INSURANCE AND MISCELLANEOUS	2117	3127	4937	8327	_____	4731	4795	8736
INTEREST ON NON-LAND CAPITAL	13604	19172	28756	47780	_____	27874	29666	44875
LAND CHARGE-NET RENT	8616	17416	26659	53048	_____	27131	30605	42368
TOTAL NON-FEED COST	87370	133660	202714	341884	_____	195946	215937	312937
CAPITAL ACCOUNT ADJUSTMENT	-426	559	-276	-1077	_____	-217	256	-1209
MANAGEMENT RETURNS	-6358	-14453	-10638	-10218	_____	-11118	-1164	-35651
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.93	0.89	0.95	0.97	_____	0.94	0.99	0.89
FARM PRODUCTION PER MAN	62100	81066	99943	119992	_____	98229	105729	97872
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	124231	174501	254732	440496	_____	252813	284917	390004
INVENTORY CHANGE	6080	5305	12129	7299	_____	8033	10041	-5296
ACCTS, RECEIVABLE (NET CHANGE)	0	365	236	192	_____	232	142	-508
FARM PRODUCTS USED	260	694	864	1252	_____	811	894	1318
LESS : PURCHASED FEED	44122	49144	59536	89617	_____	60862	65265	85117
: PURCHASED LIVESTOCK	5012	13074	16072	26879	_____	15982	16214	21904
ADJUSTED GROSS FARM INCOME	81438	118647	192353	332744	_____	185045	214516	278495
CASH OPERATING EXPENSE	35922	58716	93927	165996	_____	90842	103159	146557
PREPAID EXPENSE (-IF INCR.)	-218	-254	-818	-497	_____	-483	-828	-1841
ACCTS. PAYABLE (+IF INCR.)	0	14	-28	-186	_____	-46	-95	0
FARM PRODUCED INPUTS	135	295	394	721	_____	400	382	1020
TOTAL OPERATING EXPENSE	35838	58770	93473	166032	_____	90711	102616	145735
INCOME BEFORE DEPRECIATION	45600	59877	98880	166711	_____	94334	111899	132761
LESS DEPRECIATION	15417	22418	36176	53981	_____	32906	33647	62400
CAPITAL ACCOUNT ADJUSTMENT	-426	559	-276	-1077	_____	-217	256	-1209
NET FARM INCOME *	29757	38018	62426	111652	_____	61210	78509	69151
(OPERATOR'S SHARE) *	( 13587)	( 16454)	( 17176)	( 23478)	_____	( 17857)	( 25954)	( -3878)
LABOR AND MGT. INCOME PER OPR.	6290	-578	3070	-3955	_____	807	11356	-21407
RATE EARNED ON INVEST. %	4.96	3.82	5.08	5.43	_____	4.96	6.01	3.73

Note: Variations in totals are due to rounding to the nearest dollar.

\*Interest expense deducted from operator's share only.

**Table 24a. Average Operating Costs, Investments, and Land Use of Hog Farms by Size and Months of Labor, Southern Illinois, 1985**

RANGE IN SIZE (TOTAL ACRES)	60-259	260-499	500-799	OVER 799	YOUR FARM	ALL FARMS	BY MONTHS OF LABOR	
MONTHS OF LABOR							21-27 MO.	31-39 MO.
NUMBER OF FARMS	30	65	66	47		208	51	13
SELECTED COST AND RETURN								
ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	32.43	31.96	30.13	29.99	_____	30.51	32.15	30.31
PESTICIDES	17.01	17.45	16.44	14.59	_____	15.83	16.65	15.60
SEED AND OTHER CROP	14.93	16.13	15.06	14.89	_____	15.18	16.65	15.52
CROP TOTAL	* 64.36	* 65.54	* 61.63	* 59.47	_____	* 61.53	* 65.45	* 61.42
AUTO AND UTILITIES	20.48	14.36	11.68	9.14	_____	11.44	11.53	11.94
MACHINERY REPAIRS, SUPPLIES	27.70	22.45	20.75	17.83	_____	20.08	21.30	21.04
MACHINERY HIRE	6.31	5.40	6.18	3.16	_____	4.69	4.46	2.52
FUEL AND OIL	20.68	18.40	16.54	14.16	_____	16.01	14.68	17.51
MACHINERY DEPRECIATION	47.64	41.11	42.53	33.26	_____	38.35	36.27	53.66
POWER AND EQUIPMENT TOTAL	* 122.82	* 101.72	* 97.68	* 77.55	_____	* 90.57	* 88.24	* 106.66
DRYING AND STORAGE	3.57	3.85	4.21	4.44	_____	4.22	3.70	3.48
BUILDING REPAIR	7.19	4.93	4.46	2.61	_____	3.85	2.91	3.81
BUILDING DEPRECIATION	45.97	27.25	24.54	17.65	_____	22.93	18.14	27.89
BUILDING TOTAL	* 56.72	* 36.04	* 33.22	* 24.70	_____	* 30.99	* 24.75	* 35.18
LABOR UNPAID	84.37	48.64	32.76	19.86	_____	32.31	31.45	23.01
LABOR HIRED	21.85	12.69	17.22	18.02	_____	16.92	15.09	29.80
LABOR TOTAL	* 106.22	* 61.33	* 49.98	* 37.88	_____	* 49.23	* 46.55	* 52.81
VALUE OF FEED FED	355.64	218.44	184.33	146.93	_____	181.71	172.57	175.54
CAPITAL PURCHASES	61.38	29.94	31.30	34.64	_____	33.86	29.46	37.97
OPERATOR INTEREST PAID	61.71	41.22	42.36	38.82	_____	41.42	36.17	52.75
CROP RETURNS	232.19	230.30	235.10	217.01	_____	225.98	237.81	229.18
LIVESTOCK RETURN ABOVE FEED	256.06	127.17	115.26	93.15	_____	113.89	104.23	129.69
VALUE OF FARM PRODUCTION	494.46	363.30	357.01	313.98	_____	345.08	347.72	364.93
TOTAL NON-FEED COST	530.48	409.27	376.24	322.60	_____	365.41	350.02	410.06
MANAGEMENT RETURNS	-38.61	-44.26	-19.75	-9.64	_____	-20.74	-1.89	-46.72
FARM INVESTMENT:								
LIVESTOCK INVENTORY	44273	57535	74700	127014		76768	82499	102425
GRAIN INVENTORY	20545	44302	73334	131355		69758	82913	103746
REMAINING COST IN--								
MACHINERY AND AUTO	18524	26549	48489	77546		43877	46796	89602
BUILDINGS AND FENCE	31424	36199	50180	69967		47577	42388	77630
SOIL FERTILITY	0	84	42	30		46	63	192
VALUE OF LAND (CURRENT)	<u>205132</u>	<u>414676</u>	<u>634739</u>	<u>1263044</u>		<u>645980</u>	<u>728680</u>	<u>1008762</u>
TOTAL FARM INVESTMENT	319898	579345	881482	1668957		884006	983339	1382356
TOTAL INVESTMENT PER ACRE	1652	1560	1434	1419		1462	1405	1706
MACHINERY INVESTMENT PER TILLABLE ACRE	112	81	90	73		82	76	117
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	47.1	43.5	42.1	40.9	_____	42.0	43.9	40.0
SOYBEANS	32.1	35.6	39.8	38.3	_____	38.0	40.2	37.5
WHEAT	3.4	5.1	4.1	5.5	_____	4.9	4.1	8.4
OTHER SMALL GRAIN	0.0	0.5	0.2	0.3	_____	0.3	0.4	0.1
DIVERTED ACRES	2.8	5.1	4.5	5.8	_____	5.1	4.0	7.9
ALL HAY AND PASTURE	6.5	5.3	4.1	5.6	_____	5.1	3.2	2.1
CROP YIELDS, BU. PER ACRE								
CORN	118	113	119	113	_____	115	120	117
SOYBEANS	43	38	40	37	_____	39	40	42
WHEAT	38	41	41	41	_____	41	43	38

Note: Variations in totals are due to rounding to the nearest dollar.

\*Figures marked with an asterisk are subtotals.

Table 25. Average Return, Costs, and Financial Summary of Dairy Farms by Size and Number of Cows in the Herd, Northern and Southern Illinois, 1985

	DAIRY FARMS-NORTHERN ILLINOIS				DAIRY FARMS-SOUTHERN ILLINOS			
NUMBER OF COWS IN HERD	10-39	40-79	OVER 79	ALL FARMS	10-39	40-79	OVER 79	ALL FARMS
NUMBER OF FARMS	27	110	35	172	14	74	37	125
TOTAL ACRES IN FARM	247	333	512	356	366	394	509	425
ACRES OF TILLABLE LAND	213	280	429	300	316	367	462	389
SOIL RATING ON TILLABLE LAND	73	72	71	72	56	60	60	60
TOTAL MONTHS LABOR	18.3	22.5	36.4	24.7	18.9	22.7	33.6	25.5
MONTHS OF HIRED LABOR	4.9	5.9	14.0	7.4	3.8	7.4	15.0	9.3
BEEF PRODUCED, CWT.	231	434	798	476	249	377	633	438
PORK PRODUCED, CWT.	217	212	394	250	169	78	207	126
DAIRY COWS, NUMBER	32	55	104	62	31	59	105	70
DOLLAR RETURNS PER FARM:								
CROP RETURNS	58534	76445	125156	83546	58596	79074	117324	88102
LIVESTOCK RETURNS ABOVE FEED	33685	59910	118643	67745	30628	64718	118426	76797
CUSTOM WORK	314	1161	338	860	656	684	479	620
OTHER FARM RECEIPTS	1633	2201	3862	2450	2591	2738	4337	3195
VALUE OF FARM PRODUCTION	94166	139717	247999	154601	92471	147214	240567	168715
DOLLAR COSTS PER FARM:								
CROP EXPENSES	12852	17145	28971	18878	17045	22521	31663	24614
POWER AND EQUIPMENT	24867	37729	63839	41023	31214	47459	67234	51493
BUILDING AND FENCE	7649	12458	30643	15404	5953	10942	17625	12362
LABOR	20478	25374	40764	27737	21190	25556	38356	28856
LIVESTOCK SERVICES & SUPPLIES	5952	9699	20203	11248	3016	7159	14952	9002
TAXES	4320	5153	8321	5667	3081	4013	4942	4184
INSURANCE AND MISCELLANEOUS	2198	3162	6064	3601	2830	3341	4955	3762
INTEREST ON NON-LAND CAPITAL	14649	24597	50341	28274	13809	23126	38017	26490
LAND CHARGE-NET RENT	15550	19735	29225	21009	13967	19841	22935	20099
TOTAL NON-FEED COST	108515	155051	278372	172840	112105	163959	240679	180861
CAPITAL ACCOUNT ADJUSTMENT	-202	-24	-266	-101	-170	-223	514	0
MANAGEMENT RETURNS	-14551	-15358	-30638	-18341	-19804	-16969	402	-12144
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.87	0.90	0.89	0.89	0.82	0.90	1.00	0.93
FARM PRODUCTION PER MAN	61736	74603	81777	75259	58690	77716	85855	79311
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	106130	153470	283758	172551	101299	165620	282339	192965
INVENTORY CHANGE	2043	10013	15318	9842	6023	8644	20858	11966
ACCTS. RECEIVABLE (NET CHANGE)	619	27	1037	325	-488	-105	108	-85
FARM PRODUCTS USED	1019	1407	2648	1598	1037	1442	2514	1714
LESS : PURCHASED FEED	11774	18968	40924	22306	13072	24958	59126	33740
: PURCHASED LIVESTOCK	3370	5571	12374	6610	2115	3032	5087	3538
ADJUSTED GROSS FARM INCOME	94667	140378	249463	155400	92683	147609	241604	169280
CASH OPERATING EXPENSE	47357	66198	123719	74945	48686	72223	115002	82250
PREPAID EXPENSE(-IF INCR.)	0	348	80	239	57	0	65	26
ACCTS. PAYABLE (+IF INCR.)	204	-126	-18	-52	0	341	-426	76
FARM PRODUCED INPUTS	542	700	1486	835	514	784	1466	956
TOTAL OPERATING EXPENSE	48103	67119	125266	75966	49257	73349	116105	83306
INCOME BEFORE DEPRECIATION	46564	73259	124197	79434	43426	74260	125499	85974
LESS DEPRECIATION	15295	25260	49293	28586	17870	30437	43247	32822
CAPITAL ACCOUNT ADJUSTMENT	-202	-24	-266	-101	-170	-223	514	0
NET FARM INCOME *	31066	47974	74638	50745	25385	43599	82766	53152
(OPERATOR'S SHARE) *	( 16013)	( 14346)	( 26288)	( 17038)	( 13419)	( 15960)	( 37275)	( 21985)
LABOR AND MGT. INCOME PER OPR.	-740	1004	-9039	-1313	-3262	-1606	12484	2379
RATE EARNED ON INVEST. %	3.17	4.26	4.38	4.18	1.77	3.92	7.14	4.94

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Interest expense deducted from operator's share only.



**Table 25a. Average Operating Costs, Investments, and Land Use of Dairy Farms by Size and Number of Cows in the Herd, Northern and Southern Illinois, 1985**

NUMBER OF COWS IN HERD NUMBER OF FARMS	10-39 27	40-79 110	OVER 79 35	ALL FARMS 172	10-39 14	40-79 74	OVER 79 37	ALL FARMS 125
SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	31.11	32.00	33.88	32.45	29.43	31.91	37.48	33.64
PESTICIDES	14.09	15.06	16.10	15.25	11.27	13.90	12.88	13.30
SEED AND OTHER CROP	15.11	14.23	17.48	15.28	13.23	15.62	18.11	16.28
CROP TOTAL	* 60.32	* 61.29	* 67.46	* 62.98	* 53.93	* 61.43	* 68.48	* 63.23
AUTO AND UTILITIES	16.84	18.47	22.33	19.41	11.20	14.21	17.12	14.96
MACHINERY REPAIRS, SUPPLIES	22.26	28.77	35.63	30.04	21.90	28.80	32.62	29.52
MACHINERY HIRE	11.10	8.45	10.37	9.31	5.05	6.79	10.68	8.00
FUEL AND OIL	18.43	21.19	20.82	20.77	17.43	18.96	23.08	20.27
MACHINERY DEPRECIATION	48.08	58.00	59.50	57.33	43.18	60.69	61.91	59.53
POWER AND EQUIPMENT TOTAL	* 116.71	* 134.87	* 148.65	* 136.86	* 98.76	* 129.45	* 145.41	* 132.27
DRYING AND STORAGE	6.11	5.51	4.45	5.27	1.54	3.14	2.32	2.70
BUILDING REPAIR	6.10	6.73	11.68	8.10	3.94	4.47	4.18	4.32
BUILDING DEPRECIATION	23.68	32.30	55.22	38.02	13.36	22.24	31.62	24.73
BUILDING TOTAL	* 35.90	* 44.53	* 71.35	* 51.39	* 18.83	* 29.85	* 38.12	* 31.75
LABOR UNPAID	72.36	68.00	59.87	66.12	55.10	48.01	46.38	48.08
LABOR HIRED	23.75	22.71	35.05	26.42	11.95	21.70	36.57	26.04
LABOR TOTAL	* 96.11	* 90.71	* 94.92	* 92.54	* 67.04	* 69.71	* 82.95	* 74.12
VALUE OF FEED FED	194.52	229.12	300.15	245.97	116.87	167.93	257.70	194.85
CAPITAL PURCHASES	36.64	53.81	51.91	51.34	17.74	40.67	55.64	43.85
OPERATOR INTEREST PAID	38.67	61.75	60.01	58.67	31.85	45.77	58.41	48.95
CROP RETURNS	274.71	273.28	291.43	278.73	185.39	215.69	253.74	226.31
LIVESTOCK RETURN ABOVE FEED	158.09	214.17	276.26	226.01	96.90	176.53	256.12	197.27
VALUE OF FARM PRODUCTION	441.94	499.46	577.47	515.79	292.56	401.56	520.28	433.39
TOTAL NON-FEED COST	509.28	554.28	648.19	576.64	354.68	447.23	520.52	464.58
MANAGEMENT RETURNS	-68.29	-54.91	-71.34	-61.19	-62.66	-46.29	0.87	-31.20
FARM INVESTMENT:								
LIVESTOCK INVENTORY	37272	61734	135423	72889	37869	65204	129338	81126
GRAIN INVENTORY	32403	48034	77460	51568	32599	42606	65893	48378
REMAINING COST IN--								
MACHINERY AND AUTO	19731	35944	58312	37950	25528	46048	56376	46807
BUILDINGS AND FENCE	33993	64727	150996	77457	20708	37508	61755	42803
SOIL FERTILITY	2	0	44	9	0	86	0	51
VALUE OF LAND (CURRENT)	<u>370237</u>	<u>469885</u>	<u>695840</u>	<u>500221</u>	<u>332559</u>	<u>472402</u>	<u>546067</u>	<u>478544</u>
TOTAL FARM INVESTMENT	493638	680324	1118073	740095	449263	663852	859428	697708
TOTAL INVESTMENT PER ACRE	1998	2043	2184	2079	1229	1685	1688	1642
MACHINERY INVESTMENT PER TILLABLE ACRE	93	128	136	127	81	126	122	120
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	50.5	53.4	55.5	53.7	34.5	39.8	45.2	41.2
SOYBEANS	10.0	5.3	2.0	4.9	25.7	27.2	25.4	26.4
WHEAT	1.9	0.6	1.0	0.9	7.5	6.2	4.0	5.5
OTHER SMALL GRAIN	6.0	5.5	4.4	5.3	1.1	0.4	0.7	0.6
DIVERTED ACRES	2.6	2.5	2.0	2.4	3.6	3.1	2.2	2.8
ALL HAY AND PASTURE	26.8	30.6	33.5	31.0	22.8	19.8	19.6	20.0
CROP YIELDS, BU. PER ACRE								
CORN	134	125	129	127	84	101	111	103
SOYBEANS	42	39	47	41	30	34	39	35
WHEAT	59	75	79	73	32	36	42	37

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Figures marked with an asterisk are subtotals.

**Table 26. Average Return, Costs, and Financial Summary of Beef Cattle Farms by Size and Months of Labor, Northern and Southern Illinois, 1985**

BEEF FARMS								
AREA OF STATE	NORTHERN ILLINOIS							SOUTHERN
RANGE IN SIZE (TOTAL ACRES)	180-339	340-799	OVER 799	ALL FARMS	YOUR FARM	BY MONTHS	OF LABOR	ALL FARMS
MONTHS OF LABOR						21-27 MO.	31-39 MO.	
NUMBER OF FARMS	18	81	29	128		30	13	28
TOTAL ACRES IN FARM	272	509	1091	607		674	840	554
ACRES OF TILLABLE LAND	227	434	922	515		573	687	453
SOIL RATING ON TILLABLE LAND	80	79	80	80		82	77	53
TOTAL MONTHS LABOR	13.8	19.0	31.8	21.1		24.1	35.3	20.8
MONTHS OF HIRED LABOR	0.3	5.2	13.5	6.4		8.7	16.9	5.5
BEEF PRODUCED, CWT.	1152	2056	3956	2359		2678	3648	968
PORK PRODUCED, CWT.	14	738	1796	876		1025	2032	517
DAIRY COWS, NUMBER	0	0	0	0		0	0	0
DOLLAR RETURNS PER FARM:								
CROP RETURNS	77347	140525	304767	168851		184455	220828	87682
LIVESTOCK RETURNS ABOVE FEED	18598	24596	54958	30631		27731	57859	12421
CUSTOM WORK	1194	1866	1942	1789		1246	1496	1054
OTHER FARM RECEIPTS	1744	2707	8088	3791		4193	3876	1198
VALUE OF FARM PRODUCTION	98883	169695	369756	205063		217625	284059	102355
DOLLAR COSTS PER FARM:								
CROP EXPENSES	17595	32884	67880	38663		42744	46072	24773
POWER AND EQUIPMENT	29479	42855	87833	51165		54987	73371	35534
BUILDING AND FENCE	17016	15719	34363	20126		19356	30237	7158
LABOR	16113	20978	37677	24078		27553	40514	22551
LIVESTOCK SERVICES & SUPPLIES	2074	4522	9743	5361		5385	9390	3922
TAXES	5029	9056	18441	10616		11939	15348	4508
INSURANCE AND MISCELLANEOUS	3250	4496	8755	5286		5878	7670	2726
INTEREST ON NON-LAND CAPITAL	27416	39526	80008	46995		50868	67680	21965
LAND CHARGE-NET RENT	18502	35587	75910	42320		49495	52637	19364
TOTAL NON-FEED COST	136474	205626	420611	244609		268204	342919	142500
CAPITAL ACCOUNT ADJUSTMENT	-321	-219	-1206	-457		-86	-1233	-377
MANAGEMENT RETURNS	-37912	-36150	-52061	-40003		-50664	-60093	-40522
FARM PRODUCTION PER \$1.00								
OF NON-FEED COSTS	0.72	0.83	0.88	0.84		0.81	0.83	0.72
FARM PRODUCTION PER MAN	85916	107455	139727	116464		108391	96459	59153
FINANCIAL SUMMARY:								
CASH OPERATING INCOME	205536	358956	763674	429075		506017	584486	181231
INVENTORY CHANGE	-85	7672	13004	7789		-4681	16979	-2259
ACCTS. RECEIVABLE (NET CHANGE)	1453	1323	3583	1853		1431	900	-211
FARM PRODUCTS USED	390	856	1312	894		844	863	857
LESS : PURCHASED FEED	16708	35582	71194	40996		48224	62915	25150
: PURCHASED LIVESTOCK	91701	163533	340625	193554		237761	256254	52110
ADJUSTED GROSS FARM INCOME	98883	169695	369756	205063		217625	284059	102355
CASH OPERATING EXPENSE	49046	82770	174948	98911		108541	143907	65036
PREPAID EXPENSE (-IF INCR.)	-436	1081	3745	1471		861	3655	193
ACCTS. PAYABLE (+IF INCR.)	0	-36	-98	-45		0	-219	0
FARM PRODUCED INPUTS	0	108	165	106		39	45	174
TOTAL OPERATING EXPENSE	48609	83921	178759	100442		109441	147387	65403
INCOME BEFORE DEPRECIATION	50274	85773	190997	104621		108184	136673	36952
LESS DEPRECIATION	26421	30824	64956	37938		40652	53985	18251
CAPITAL ACCOUNT ADJUSTMENT	-321	-219	-1206	-457		-86	-1233	-377
NET FARM INCOME *	23531	54729	124834	66225		67446	81454	18324
(OPERATOR'S SHARE) *	( 6068)	( 5594)	( 24923)	( 10040)	( )	( 432)	( 5447)	( -7319)
LABOR AND MGT. INCOME PER OPR.	-21068	-19509	-35179	-23278		-30732	-37066	-23684
RATE EARNED ON INVEST. %	1.15	3.24	4.12	3.45		3.04	3.27	0.12

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Interest expense deducted from operator's share only.

**Table 26a. Average Operating Costs, Investments, and Land Use of Beef Cattle Farms by Size and Months of Labor, Northern and Southern Illinois, 1985**

AREA OF STATE RANGE IN SIZE (TOTAL ACRES) MONTHS OF LABOR NUMBER OF FARMS	NORTHERN ILLINOIS					BY MONTHS OF LABOR		SOUTHERN
	180-339	340-799	OVER 799	ALL FARMS	YOUR FARM	21-27 MO.	31-39 MO.	ALL FARMS
	18	81	29	128		30	13	28
SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	40.33	37.85	34.06	36.47		33.46	34.43	30.75
PESTICIDES	20.38	19.85	20.41	20.11		21.66	16.86	12.81
SEED AND OTHER CROP	16.74	18.14	19.17	18.47		19.48	15.81	11.12
CROP TOTAL	* 77.45	* 75.84	* 73.64	* 75.05		* 74.61	* 67.11	* 54.68
AUTO AND UTILITIES	11.38	8.91	7.58	8.52		8.04	10.48	8.27
MACHINERY REPAIRS, SUPPLIES	26.24	18.93	18.05	19.03		18.58	21.87	19.15
MACHINERY HIRE	8.11	6.76	8.28	7.46		5.75	7.36	5.45
FUEL AND OIL	18.79	17.79	16.50	17.33		15.60	20.02	15.21
MACHINERY DEPRECIATION	65.24	46.44	44.89	46.98		48.01	47.14	30.35
POWER AND EQUIPMENT TOTAL	* 129.77	* 98.83	* 95.29	* 99.31		* 95.98	* 106.87	* 78.43
DRYING AND STORAGE	14.47	6.78	7.01	7.35		6.13	4.64	3.23
BUILDING REPAIR	9.37	4.82	4.69	5.05		4.71	7.91	2.68
BUILDING DEPRECIATION	51.07	24.65	25.58	26.66		22.95	31.49	9.89
BUILDING TOTAL	* 74.91	* 36.25	* 37.28	* 39.07		* 33.79	* 44.04	* 15.80
LABOR UNPAID	68.34	36.36	22.76	32.83		30.98	30.92	38.66
LABOR HIRED	2.59	12.02	18.12	13.91		17.11	28.09	11.11
LABOR TOTAL	* 70.93	* 48.38	* 40.88	* 46.74		* 48.09	* 59.01	* 49.77
VALUE OF FEED FED	250.36	248.80	231.49	241.88		246.04	275.77	137.21
CAPITAL PURCHASES	36.76	39.49	29.67	35.34		37.80	40.20	25.94
OPERATOR INTEREST PAID	53.28	61.54	58.14	59.65		67.71	73.18	33.75
CROP RETURNS	340.49	324.07	330.64	327.75		321.97	321.65	193.53
LIVESTOCK RETURN ABOVE FEED	81.87	56.72	59.62	59.46		48.41	84.28	27.41
VALUE OF FARM PRODUCTION	435.29	391.35	401.14	398.04		379.87	413.76	225.91
TOTAL NON-FEED COST	600.76	474.21	456.31	474.80		468.15	499.49	314.52
MANAGEMENT RETURNS	-166.89	-83.37	-56.48	-77.65		-88.44	-87.53	-89.44
FARM INVESTMENT:								
LIVESTOCK INVENTORY	96916	163659	320649	189841		215741	282350	89500
GRAIN INVENTORY	62097	88837	188912	107750		113177	129208	49086
REMAINING COST IN--								
MACHINERY AND AUTO	34437	43369	81771	50814		54797	67094	29586
BUILDINGS AND FENCE	61300	58601	123479	73679		72963	112515	21103
SOIL FERTILITY	0	0	0	0		0	0	36
VALUE OF LAND (CURRENT)	440525	847321	1807378	1007628		1178460	1253260	461056
TOTAL FARM INVESTMENT	695275	1201788	2522188	1429712		1635137	1844425	650366
TOTAL INVESTMENT PER ACRE	2560	2362	2312	2354		2426	2197	1175
MACHINERY INVESTMENT PER TILLABLE ACRE	152	100	89	99		96	98	65
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	66.1	67.4	67.2	67.2		64.9	68.0	37.1
SOYBEANS	10.5	14.0	17.6	15.2		18.6	11.6	20.4
WHEAT	1.8	0.8	1.3	1.1		0.9	0.9	5.9
OTHER SMALL GRAIN	1.4	1.7	1.4	1.6		1.3	1.7	0.6
DIVERTED ACRES	5.0	3.4	3.2	3.4		3.7	2.3	4.4
ALL HAY AND PASTURE	14.7	10.6	7.3	9.5		8.4	12.1	23.2
CROP YIELDS, BU. PER ACRE								
CORN	147	148	149	148		148	147	110
SOYBEANS	49	46	50	48		50	47	38
WHEAT	84	75	80	78		83	73	46

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Figures marked with an asterisk are subtotals.



**Table 27. Average Return, Costs, and Financial Summary of Part-Time Farms by Size and Soil Rating, Northern and Southern Illinois, 1985**

AREA OF STATE	PART-TIME FARMS (USED LESS THAN 10 MONTHS OF LABOR)								
	NORTHERN ILLINOIS					SOUTHERN ILLINOIS			
	GRAIN 56-85		GRAIN 86-100		LIVESTOCK	GRAIN 36-85		LIVESTOCK	
FARM TYPE AND SOIL RATING	UNDER 260	OVER 260	UNDER 260	OVER 260	ALL FARMS	UNDER 260	OVER 260	ALL FARMS	
RANGE IN SIZE (TOTAL ACRES)									
NUMBER OF FARMS	35	23	43	26	10	30	24	11	
TOTAL ACRES IN FARM	179	369	176	363	165	183	381	173	
ACRES OF TILLABLE LAND	163	337	167	348	124	162	375	113	
SOIL RATING ON TILLABLE LAND	76	77	93	91	79	57	62	56	
TOTAL MONTHS LABOR	5.9	6.8	5.4	7.3	5.5	5.9	7.8	7.0	
MONTHS OF HIRED LABOR	0.4	0.6	0.6	0.9	0.4	0.2	0.4	0.7	
BEEF PRODUCED, CWT.	18	7	7	17	229	32	31	146	
PORK PRODUCED, CWT.	20	40	27	0	644	18	92	809	
DAIRY COWS, NUMBER	0	2	0	0	0	0	0	0	
DOLLAR RETURNS PER FARM:									
CROP RETURNS	45968	104207	54759	119832	28859	29104	79280	21920	
LIVESTOCK RETURNS ABOVE FEED	702	1894	716	-179	6867	552	852	13231	
CUSTOM WORK	414	857	322	2764	46	515	1181	38	
OTHER FARM RECEIPTS	867	1551	501	1013	380	241	458	415	
VALUE OF FARM PRODUCTION	47951	108509	56298	123429	36152	30412	81771	35604	
DOLLAR COSTS PER FARM:									
CROP EXPENSES	10934	23647	12064	24267	7371	9498	20701	5483	
POWER AND EQUIPMENT	12662	21386	13921	26274	12678	12729	26814	13177	
BUILDING AND FENCE	3793	8974	5291	7596	4034	2281	3294	5103	
LABOR	6555	7855	6145	8677	6376	6674	9031	8118	
LIVESTOCK SERVICES & SUPPLIES	257	379	161	145	1445	171	163	1357	
TAXES	3201	6136	3838	7775	2429	1807	4016	1309	
INSURANCE AND MISCELLANEOUS	1710	2460	1760	2997	1403	1281	2250	1709	
INTEREST ON NON-LAND CAPITAL	6208	11641	6462	12863	9599	3926	8574	7844	
LAND CHARGE-NET RENT	12741	25912	15379	32048	10420	7661	18374	6076	
TOTAL NON-FEED COST	58060	108390	65021	122642	55755	46027	93216	50177	
CAPITAL ACCOUNT ADJUSTMENT	-47	156	141	1497	-299	-181	283	350	
MANAGEMENT RETURNS	-10156	274	-8581	2284	-19902	-15797	-11162	-14222	
FARM PRODUCTION PER \$1.00									
OF NON-FEED COSTS	0.83	1.00	0.87	1.01	0.65	0.66	0.88	0.71	
FARM PRODUCTION PER MAN	98051	192843	124946	203003	79021	61715	125133	60642	
FINANCIAL SUMMARY:									
CASH OPERATING INCOME	46209	97923	50996	123176	75227	30227	83570	62864	
INVENTORY CHANGE	2568	11210	6183	1789	-10096	1112	2284	1770	
ACCTS. RECEIVABLE (NET CHANGE)	28	1033	-468	-647	137	8	-45	0	
FARM PRODUCTS USED	145	251	99	148	179	334	436	345	
LESS : PURCHASED FEED	647	1413	403	926	13783	582	3609	22832	
: PURCHASED LIVESTOCK	352	494	109	111	15512	688	866	6543	
ADJUSTED GROSS FARM INCOME	47951	108509	56299	123429	36152	30412	81771	35604	
CASH OPERATING EXPENSE	24818	50858	30175	53899	21245	20980	41815	19995	
PREPAID EXPENSE (-IF INCR.)	-164	-872	81	910	0	0	-71	0	
ACCTS. PAYABLE (+IF INCR.)	-69	-105	112	-9	0	0	0	0	
FARM PRODUCED INPUTS	78	229	58	47	11	263	317	15	
TOTAL OPERATING EXPENSE	24661	50108	30426	54845	21256	21244	42060	20010	
INCOME BEFORE DEPRECIATION	23290	58401	25872	68583	14896	9168	39710	15594	
LESS DEPRECIATION	8158	13705	7204	15588	8614	6642	15679	8929	
CAPITAL ACCOUNT ADJUSTMENT	-47	156	141	1497	-299	-181	283	350	
NET FARM INCOME *	15084	44852	18809	54493	5981	2344	24314	7015	
(OPERATOR'S SHARE) *	( 2168)	( 19807)	( 6171)	( 15738)	( -3447)	( -4314)	( -1563)	( -7914)	
LABOR AND MGT. INCOME PER OPR.	-4028	7124	-3085	9449	-14037	-9702	-3112	-7322	
RATE EARNED ON INVEST. %	2.46	5.21	3.12	5.31	0.04	-1.97	3.09	-0.14	

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Interest expense deducted from operator's share only.

**Table 27a. Average Operating Costs, Investments, and Land Use of Part-Time Farms by Size and Soil Rating, Northern and Southern Illinois, 1985**

AREA OF STATE FARM TYPE AND SOIL RATING RANGE IN SIZE (TOTAL ACRES) NUMBER OF FARMS	NORTHERN ILLINOIS					SOUTHERN ILLINOIS		
	GRAIN 56-85		GRAIN 86-100		LIVESTOCK	GRAIN 36-85		LIVESTOCK
	UNDER 260	OVER 260	UNDER 260	OVER 260	ALL FARMS	UNDER 260	OVER 260	ALL FARMS
	35	23	43	26	10	30	24	11
SELECTED COST AND RETURN ITEMS PER TILLABLE ACRE:								
SOIL FERTILITY	33.06	36.04	35.71	34.80	29.74	29.01	25.88	23.65
PESTICIDES	19.07	18.79	19.53	18.96	14.30	15.70	15.99	11.18
SEED AND OTHER CROP	15.02	15.33	17.12	15.92	15.31	14.04	13.35	13.69
CROP TOTAL	* 67.15	* 70.16	* 72.36	* 69.69	* 59.35	* 58.75	* 55.23	* 48.52
AUTO AND UTILITIES	8.78	4.42	7.93	6.51	14.72	8.49	5.08	23.00
MACHINERY REPAIRS, SUPPLIES	13.24	11.04	14.75	13.57	15.72	12.74	13.02	18.10
MACHINERY HIRE	7.66	9.64	14.97	7.27	9.11	12.77	5.61	7.91
FUEL AND OIL	11.75	10.34	12.66	12.14	13.66	11.96	11.34	25.83
MACHINERY DEPRECIATION	36.32	28.01	33.19	35.96	48.87	32.76	36.49	41.77
POWER AND EQUIPMENT TOTAL	* 77.76	* 63.45	* 83.50	* 75.45	* 102.08	* 78.73	* 71.53	* 116.61
DRYING AND STORAGE	6.76	10.83	16.45	11.58	7.28	4.18	2.44	4.50
BUILDING REPAIR	2.75	3.15	5.27	1.42	4.71	1.71	1.12	3.42
BUILDING DEPRECIATION	13.78	12.65	10.02	8.80	20.49	8.21	5.23	37.24
BUILDING TOTAL	* 23.29	* 26.62	* 31.73	* 21.81	* 32.48	* 14.11	* 8.79	* 45.16
LABOR UNPAID	38.64	20.84	33.29	20.96	47.22	40.55	22.75	64.76
LABOR HIRED	1.61	2.46	3.57	3.96	4.11	0.74	1.34	7.08
LABOR TOTAL	* 40.26	* 23.30	* 36.86	* 24.92	* 51.34	* 41.28	* 24.09	* 71.84
VALUE OF FEED FED	6.84	7.73	5.96	2.62	237.82	11.70	11.19	269.80
CAPITAL PURCHASES	29.53	7.10	29.29	32.64	39.25	35.30	20.01	37.97
OPERATOR INTEREST PAID	30.03	24.65	16.82	41.02	55.40	23.80	25.36	99.25
CROP RETURNS	282.31	309.18	328.44	344.12	232.36	180.02	211.51	193.98
LIVESTOCK RETURN ABOVE FEED	4.31	5.62	4.30	-0.52	55.29	3.42	2.27	117.08
VALUE OF FARM PRODUCTION	294.49	321.94	337.68	354.44	291.08	188.11	218.15	315.08
TOTAL NON-FEED COST	356.57	321.59	390.00	352.19	448.91	284.70	248.69	444.05
MANAGEMENT RETURNS	-62.38	0.81	-51.47	6.56	-160.25	-97.72	-29.78	-125.86
FARM INVESTMENT:								
LIVESTOCK INVENTORY	1963	3344	1205	1684	34016	3128	5203	27153
GRAIN INVENTORY	24253	65312	31603	77040	16286	14039	35442	11106
REMAINING COST IN--								
MACHINERY AND AUTO	11984	18215	12883	23938	15528	8970	23055	11185
BUILDINGS AND FENCE	16120	22360	12892	23527	17982	5390	9093	16870
SOIL FERTILITY	0	0	0	0	0	34	22	0
VALUE OF LAND (CURRENT)	<u>303357</u>	<u>616953</u>	<u>366178</u>	<u>763052</u>	<u>248101</u>	<u>182396</u>	<u>437482</u>	<u>144659</u>
TOTAL FARM INVESTMENT	357677	726184	424760	889238	331913	213957	510297	210972
TOTAL INVESTMENT PER ACRE	2002	1967	2414	2450	2015	1171	1341	1218
MACHINERY INVESTMENT PER TILLABLE ACRE	74	54	77	69	125	55	62	99
PERCENT TILLABLE LAND IN--								
CORN AND CORN SILAGE	48.4	59.1	54.5	51.6	45.9	30.2	31.7	30.6
SOYBEANS	36.7	31.2	36.5	39.5	18.9	40.0	46.4	22.8
WHEAT	3.5	1.4	1.6	0.0	2.3	3.2	6.2	6.4
OTHER SMALL GRAIN	1.1	0.0	0.3	0.2	4.3	0.3	0.0	0.5
DIVERTED ACRES	3.5	5.5	4.5	4.5	0.8	5.1	4.3	2.4
ALL HAY AND PASTURE	3.1	1.7	1.9	0.7	21.7	6.7	4.9	33.3
CROP YIELDS, BU. PER ACRE								
CORN	143	132	158	158	138	104	126	111
SOYBEANS	42	46	49	53	33	34	38	42
WHEAT	63	56	82	0	66	41	39	43

Note: Variations in totals are due to rounding to the nearest dollar. Northern Illinois includes both northern and central Illinois.

\*Figures marked with an asterisk are subtotals.

# ASSOCIATIONS, FIELD STAFF, AND COOPERATORS ENROLLED

Associations and Field Staff

Associations and Field Staff

## BLACKHAWK 708

Kristian S. Lauritzen  
Lee K. Freedlund  
Benjamin A. Greiner  
John D. Jones  
Alan Petersohn  
David Baird

## NORTHEASTERN 370

Donald R. Muehling  
David J. O'Brien  
Gordon Wakey  
Michael G. Bossert

## WESTERN 733

Gary Goodwin  
Thomas H. Jennings  
Robert W. Baalman  
Robert R. Tracy  
Roy L. Ewalt  
Mike R. Shepherd  
Timothy D. Phelps  
Roberta Boarman  
Robert Rhea

## ILLINOIS VALLEY 812

Gerald E. Hulslander  
Stephen R. Kingry  
Erland A. Loving  
Danny L. Stetson  
Jeff Brunoehler  
Harold L. Winship  
John A. Hudson

## SANGAMON VALLEY 653

Dorrence B. Brucker  
George W. Shafer  
James E. Phelan  
Aaron Liesman  
Kevin E. Coultas  
Gary Shupe

## PIONEER 1,261

L. David Schroll  
Jerry Crump  
Roland W. Meyer  
Maurice E. Sprout  
Marvin Siekman  
Dana Scheidecker  
Gary Bressner  
Kent Meister  
Richard D. Smith  
David A. Pilgrim  
Thomas R. Hand

## LINCOLN 1,483

Arnold A. Galloway  
Wayne W. Marquart  
Robert E. Rogers  
Michael E. Schmitz  
Thomas J. Nolte  
John E. White  
Dennis J. Graden  
James H. Lutz  
Louis J. Aldag  
Donald L. Hampton  
Bradley E. Yockey  
Dathel Davidson  
David A. Simmons

## EASTERN 567

Boyd A. Henry  
Harry E. White  
James H. Locher  
Robert Boesdorfer  
Howard Peverly

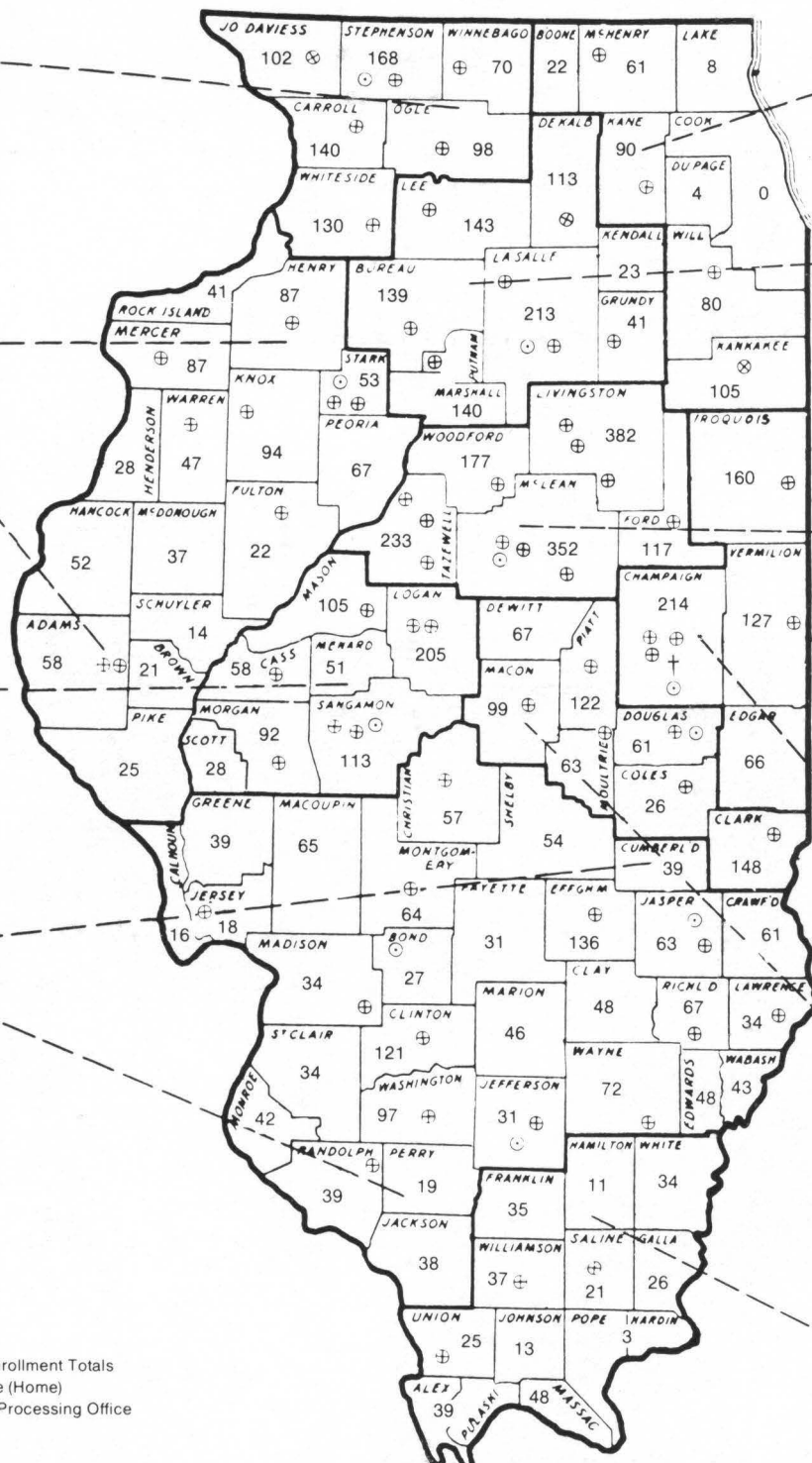
## EAST CENTRAL 586

Rolland D. Gustafson  
Warren E. Berner  
James E. Cullison  
Christopher Hausman  
Bradley E. Vissering

## SHAWNEE 292

Robert D. Kieseccoms  
Douglas Hileman

- \* Numbers are Enrollment Totals
- 68 ⊕ Field Staff Office (Home)
- 8 ○ District Record Processing Office
- † State Office



OFFICIAL ENROLLMENT  
June 1, 1986

Prepared by D. H. Lattz, C. E. Cagley, R. P. Kesler, and Irene Chow  
of the Department of Agricultural Economics

Urbana, Illinois

August, 1986

Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. WILLIAM R. OSCHWALD, Director, Cooperative Extension Service, University of Illinois at Urbana-Champaign. The Illinois Cooperative Extension Service provides equal opportunities in programs and employment.

10M-9-86-CROUSE-rat